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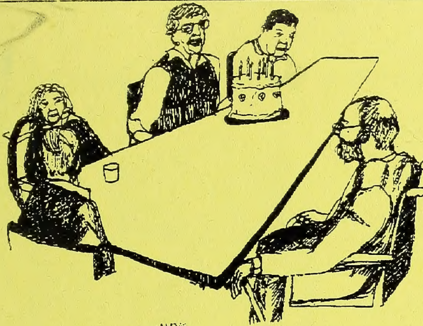
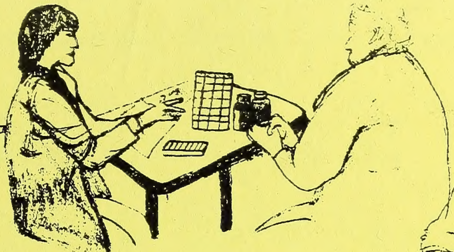
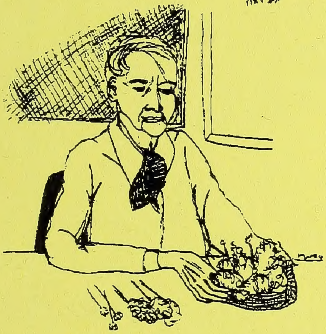
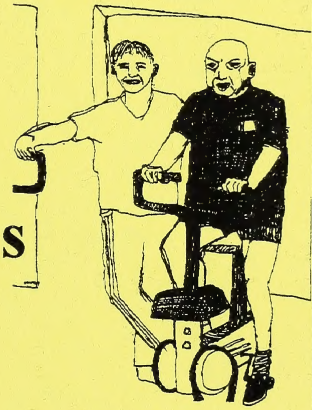






Evaluation of Adult Day Programs in Alberta



Final Report

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Evaluation of Adult Day Programs in Alberta

Final Report

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--Long Term Care Branch

EXECUTIVE SUMMARY

The purpose of this project was to design and carry out an evaluation of the Adult Day Program Demonstration Project in order to draw conclusions and make recommendations on the role of day programs in the long term care system in Alberta. The development of the Adult Day Program Demonstration Project by Alberta Health was initiated as a measure to assist in helping to maintain the frail elderly in community living arrangements and to avoid the need for entry to long term care facilities wherever possible and for as long as possible. The plan to evaluate the Adult Day Demonstration Project was an integral part of the Project itself.

SAMPLE

Fourteen day programs were included in the study, eight were part of the Adult Day Demonstration Project. An additional six well established programs were selected as comparison sites. Both urban and rural sites were represented in the sample. The five day hospital programs included in the evaluation study of adult day programs were as follows:

- Dickinsfield Day Hospital, Edmonton (Comparison)
- Medicine Hat Regional Hospital, Medicine Hat (Demonstration)
- St. Michael's Hospital, Lethbridge (Demonstration)
- Youville Psychogeriatric Day Program, Edmonton (Comparison)
- Youville Geriatric Day Hospital Program, Edmonton (Comparison)

As well, nine day support programs were included in the study as follows:

- Association of Adult Day Support Programs, Edmonton (Comparison)
- Club 36, Alzheimer's Society, Calgary (Demonstration)
- Foothills Health Unit, High River (Demonstration)
- Kerby Centre, Calgary (Comparison)
- Mountain View Health Care Centre, Didsbury (Demonstration)
- Rosehaven Day Support Program, Camrose (Comparison)
- Thorhild-Westlock Auxiliary Hospital and Nursing Home, Westlock (Demonstration)
- Vegreville Auxiliary Hospital and Nursing Home, Vegreville (Demonstration)
- Victorian Order of Nurses (VON), Lethbridge (Demonstration)

PROCEDURE

Data for this study were obtained from a variety of sources. Managers of each adult day program provided a descriptive profile of their program. Referral agency managers responded to a questionnaire detailing their experience with adult day programs. Information from client records was collected to describe day program clients. These data served to describe the clients, the programs, and program costs and utilization. Information about program outcomes was obtained through the use of other instruments directly from clients and their caregivers using interview methods across five time intervals. Instruments measured the client's health status, functional status, life satisfaction, and satisfaction with the program. Informal caregivers were also asked to rate their life satisfaction, subjective burden, opinion on institutionalization and satisfaction with the program.

A purposive sample of clients and caregivers representing different programs, genders, ages, and with varied relationships to each other were asked to participate in a qualitative component of the study. Unstructured interviews were employed to elicit further data relating to the caregiver and client experiences in the program. The guiding questions were: "Tell me about your experience in the day program," and "What effect has the day program had on your life, and the lives of your family and friends?" These interviews took place at the time of the last interview in the time series.

RESULTS

Description of the Programs

Five of the programs were situated within long term care facilities, three within seniors centres, and four in acute care hospitals. Only two of the day support programs operated in freestanding locations separate from other geriatric programs/services. The communities that most of the day programs served had a high proportion of seniors, ranging from 15% to 25% of the overall population. In most communities, a wide range of other health services were available to residents.

The hours of operation of adult day programs were primarily limited to daytime hours on weekdays. The staff to client ratio varied by type of program, with a lower client/staff ratio in day hospital programs compared to day support programs. Staff at day hospitals typically included registered nurses, rehabilitation therapists, and physicians. At day support programs, staff was likely to include recreation therapists and/or recreation therapy aides and registered nurses and/or nursing aides. Volunteers were utilized in all but one program.

The average number of clients enrolled in these day programs at the time of the study was just under 40 per site. Day support programs tended to have fewer clients and longer lengths of stay than did day hospitals. Seven of the programs had waiting lists, with the average length of time spent on the waiting list being 5.8 weeks in day hospital programs and 14.0 weeks in day support programs. Most referrals to programs were received from community programs, especially Home Care. Day programs were perceived by managers and referral agencies as delaying institutionalization, providing support and respite for caregivers, facilitating earlier hospital discharges, decreasing inpatient days and physician visits, providing health assessment and health monitoring services, providing coordinated long term care to people living in the community, and providing social interaction and support for lonely, isolated, dependent adults. Weaknesses perceived by program managers and referral agencies included limited hours of operation, inadequate funding to provide individualized programs and sufficient staffing, and communication breakdowns between the program and the community.

Cost per client day ranged from 39 to 381 dollars, with an average cost per day of $178 in day hospitals and $107 in day support programs. All but two of the programs charged a fee, ranging from $2.20 to $12.50 per day. The average cost for clients was $7.30 at both day hospital and day support programs. At nine programs this fee included meals and at six it covered transportation costs. Government was the primary source of funding for all programs and accounted for 88.2% of revenue in day hospitals and 76.7% in day support programs.

Description of Clients

Cross-Section Sample

The records of 571 clients were reviewed. Women outnumbered men by about two to one. The age of clients ranged from 23 to 96, and averaged 73.9. Most clients were English speaking, lived in their own home, and were either currently married or widowed. Most clients had multiple chronic health problems and were heavy utilizers of other health care services, such as medication, acute and long-term care hospitalization, and physician visits. Many had a history of a psychiatric problem(s). About half required some form of assistive device for ambulation. Few had designated someone to be their guardian, trustee, or power of attorney. Almost 90% of clients reported having an informal caregiver, most often a spouse or daughter. Clients reported frequent contact with family members outside the home.

On average, clients attended day support programs approximately 1.7 days per week and day hospital programs 2.0 days per week. Estimated length of stay was significantly longer in day support programs than in day hospital programs, 55.2 weeks and 22.8 weeks, respectively. Just over half of the clients were transported to the program via the Disabled Transportation System or handi-bus. From a list of eight objectives for clients of day programs developed by Alberta Health, supporting the community living was reported most frequently for clients, followed by the objective of delaying institutionalization, and the provision of ongoing treatment.

Repeated Measures Sample

The number of clients who entered the repeated measures portion of the study was 147. Eighteen clients completed the qualitative component of the study. Clients who took part in the repeated measures portion of the study did not differ significantly on the major demographic variables from the larger group.

Client Outcomes of Attendance

Outcome measure scores were examined across Times 3, 4, and 5 for the 90 clients who completed each of these measures. This included 32 cognitively impaired clients and 58 cognitively intact clients. Given the frailty of this elderly population and the stresses placed on their caregivers, maintenance of functional status, health status, and quality of life over time from an intervention such as day program attendance would represent a positive outcome. For cognitively intact clients, there were no significant changes in mental status or functional status over time. Quality of life scores increased slightly from Time 3 to Time 5 as measured by the Self-Anchoring Striving Scale, Index of Well Being, and Quality of Life Index, but these differences were not statistically significant. A number of clients in the qualitative interviews stated that their perception of their own situation changed as they saw other clients coping with worse circumstances than their own. Current perceived health status remained relatively constant across time. Clients' feelings about institutionalization did not change over time. Scores on the Satisfaction with Day Program Scale were high at all three time measures. Overall, clients were quite satisfied with the programs that they attended. As one client put it "you can laugh and enjoy ... and so the whole thing is, it's an uplifting day when you go over there". Clients identified areas for improving day programs, including transportation and the scheduling and type of activities that were available.

For cognitively impaired clients, there were no significant differences over time in mental status, functional status, or on their scores on the Memory and Behavior Checklist, which measured the frequency of a number of inappropriate behaviors and memory problems. Cognitively impaired clients were unable to complete the other instruments which measured quality of life, perceived health, feelings about institutionalization, and satisfaction with the day program.

Description of Caregivers

An informal caregiver was identified for 123 of the 147 clients, and 122 of the caregivers took part in the study. Seventeen caregivers completed qualitative interviews. The majority (72.1%) of caregivers were females, whose average age was 61.6 years and ranged from 31 to 86 years. Most of the caregivers were currently married, and caregivers were the spouses of clients in over half of the cases.

Caregiver Outcomes of Client Attendance

For the group of 80 caregivers who completed the study, there were no significant differences in total caregiver burden scores or scores on any of the five burden sub-scales over time, although total burden scores did decrease slightly over time for both those in day support and day hospital programs. The average quality of life scores on the Self-Anchoring Striving Scale and Index of Well-Being instruments for caregivers who completed the study changed relatively little over time. Similarly, no change in perceived health status or feelings about institutionalization were noted. Caregivers were also generally satisfied with the day programs, as reflected in the high scores on the Satisfaction with Day Program Scale. Again no significant differences were noted over time.

Client stimulation was what caregivers liked best, followed by respite, and the positive effect the day program was having on the client. One caregiver reported, "It was nice the mornings that he was going because he looked forward to it.... and I think he was walking better and his outlook was great." Another commented, "It was a wonderful thing that gave me Thursday afternoons free that I could go and have lunch with a friend ... read a book ... I could do just as I wanted and I didn't have to wait on anybody or make any special lunch or supper and it was just really great for me." Again, transportation, time limitations, and lack of communication with the program were identified as areas of concern.

RECOMMENDATIONS

Based on the results of the study, the following recommendations are put forth:

- ♦ That day support programs be considered an integral part of the system of long term care and that as they become available in all areas they be included as part of the single point of entry process.

- ♦ That day program spaces be expanded for day support programs particularly in urban areas where services currently cannot be offered to the total population which could benefit from them.

- ♦ That present day hospital programs be maintained in the urban areas in which they are located and that they continue to offer assessment, treatment, and rehabilitation.

- ♦ That day support programs be offered on a regional basis throughout the province to ensure that services are available to those who could benefit from program attendance.

- That resources be made available to programs in order to allow them to provide greater flexibility in scheduling hours of participation in day program attendance, including drop-in availability, as well as more varied activities to meet the individual needs of clients.
- That day programs be considered a resource to provide respite for informal caregivers and that programs be given the means to offer more weekly hours of client participation including some evening and weekend hours.
- That modest or negligible change in client outcomes in terms of their health and social functioning over a period of day program attendance be considered a successful intervention in terms of its importance in supporting the client in maintaining health and social status necessary for continued community living.
- That day programs be offered resources to expand their informal caregiver support programs in order to allow them to identify and monitor needs of informal caregivers on an ongoing basis and to offer assistance where needed.
- That resources be provided to ensure that transportation systems are an integral part of day programs for clients who need health and social support and whose residence in the community could be maintained through day program attendance.
- That further study of client fees be carried out to ensure that a financial incentive does not exist which encourages people to enter long term care centres rather than using an intermediate resource such as a day program to assist them to remain in the community.
- That a reporting system with uniform definitions and categories for day program revenues and expenditures be put in place to ensure more accuracy and comparability in tracking program costs.
- That standards for day programs, which reflect the day hospital/day support typology confirmed in this study, be developed and implemented across all day programs.

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Chapter 1:
Introduction and Purpose of Study

CHAPTER 1: INTRODUCTION AND PURPOSE OF THE STUDY

Adult day programs have flourished as a part of the long term care system for over two decades in Alberta. The concept was not a new one, as the first day hospitals were developed in the United Kingdom almost a half century ago. Because of the consistent increase in both the number and proportion of elderly people in the Canadian population, the health and social well-being of elderly people have presented issues of considerable concern to policy makers, planners, and the public at large. The prevalence of chronic illness and disability among the elderly population and the disproportionate use of health services and facilities by this group has led to concerns about whether health and social supportive services being provided in the past would be adequate to meet the needs in the future. In that the dominant mode of care provided to date has been short-term treatment organized on an acute care model, the needs of those with chronic illness and loss of functional abilities would seem to require new approaches. An alternative method of providing assessment, treatment and rehabilitative services to the frail elderly who maintain their community residence is the adult day program. This alternative is attractive because it offers the opportunity for elderly people to remain in their homes while providing support for them, and many believe that it holds the possibility of delaying or preventing entry to a long term care facility by restoring or at least maintaining health and functional abilities.

Although growth in the number and size of programs has been gradual, another model of adult day program has emerged from the original day hospital model. This occurred because it was recognized that the value of day hospital programs to clients was often to be found in the social support provided by the group of clients and staff. Day support programs for the most part have focused primarily on programs of social support for the client, rather than on intensive on-site medical and rehabilitation assessment and treatment. Day programs are thus a resource which have achieved the status of a legitimate alternative in long term care programming for elderly clients. Although the total number of day programs is still relatively small, considerable impetus has been given to their development with the initiative of the Long Term Care Branch of Alberta Health known as the Adult Day Programs Demonstration Project commencing in 1990.

PURPOSE

The purpose of this project was to design and carry out an evaluation of the Adult Day Program Demonstration Project in order to draw conclusions and make recommendations on the role of day programs in the long term care system in Alberta. The development of the Adult Day

Program Demonstration Project by Alberta Health was initiated as a measure to assist in helping to maintain the frail elderly in community living arrangements and to avoid the need for entry to long term care facilities wherever possible and for as long as possible. The plan to evaluate the Adult Day Demonstration Project was an integral part of the Project itself. In responding to the Request for Proposal document, the investigators developed a proposal which was submitted to Alberta Health. Following selection of the study team to carry out the project, a contract was drawn up between Alberta Health and the University of Alberta which would allow the researchers the opportunity to carry out the study protocol and to publish the results in scientific journals. Although the independence of the researchers in carrying out the study was clearly identified, it was also agreed that there would be close collaboration with the Department in all phases of the study. Subsequent to the development and acceptance of the terms of the research grant on the part of both the Department and the University, the project team and the Alberta Health Day Program Demonstration Project Evaluation Committee met to develop a plan for the data collection and to delineate a framework of responsibilities in carrying out the study. The agreement outlined in Table 1.1 was drawn up and outlines primary objectives, data sources, and responsibilities for the various activities to be carried out. This is presented at the outset and forms the basis for the study design, data collection and analysis, conclusions and recommendations.

PRESENTATION OF THE REPORT

In the chapters that follow, the literature on adult day programs will be explored in Chapter 2 and the methods for carrying out the project will be presented in Chapter 3. In Chapter 4 the data on the 14 day programs studied will be presented and discussed. The profile of the larger group of clients served by these 14 adult day programs in terms of a number of the variables of interest is the subject of Chapter 5. In Chapters 6 and 7, the results of data collection for the selected group of clients and caregivers at each of the day programs is presented and explored. In Chapter 8, all of the study data will be addressed in terms of the primary objectives agreed to by the Department and the project team at the outset of the study. Conclusions and recommendations will be put forward in the context of this Chapter.

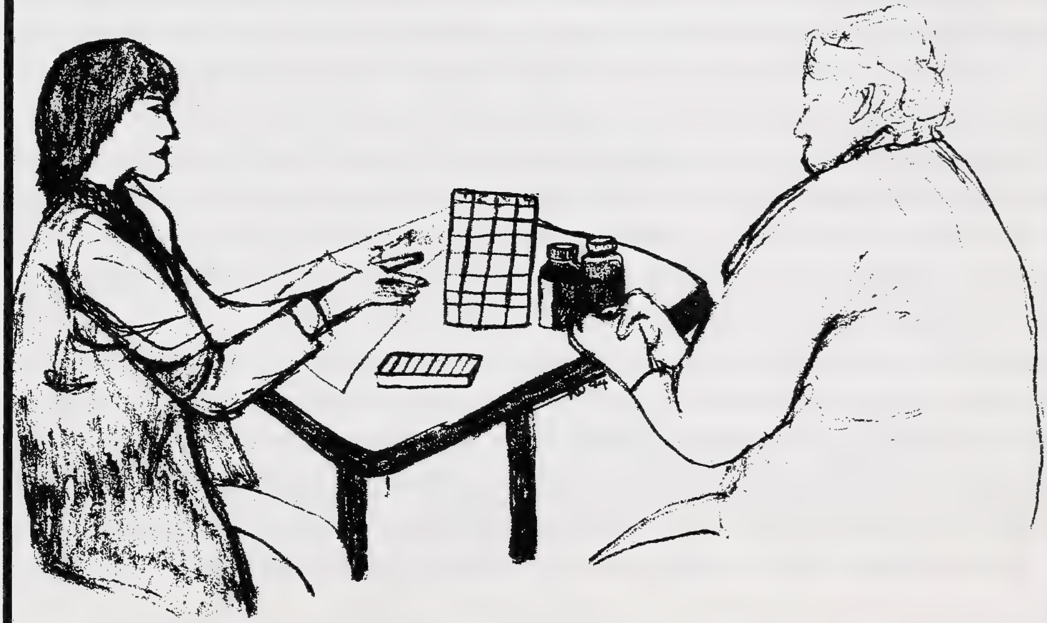
Table 1.1. Objectives of the Adult Day Program Demonstration Project Evaluation Study

PRIMARY OBJECTIVES	DATA SOURCES (INSTRUMENTS)	RESPONSIBILITIES
1a. To make recommendations on the role of day programs in Alberta's long term care system	- Program Data (Day Program Collection Form) - Client Data DH/DSP (Client Data Form/AAPI) - Admission/Discharge Data re: acute care, home care and long term care - Patient satisfaction (Satisfaction with Day Program Scale)	- Study Team - Adult Day Program Demonstration Project Evaluation Committe - Sites - Discussion and integration by Study Team in Collaboration with Project Evaluation Committee Programs
1b. To validate the initial provincial typology of day programs and to assess various models of day programs and to assess various models of day programs (including existing and new models)	- Program Data (Program Data Form) - Client Data (Client Data Form/AAPI) - Literature on standards for day programs - Discussion relative to standards for day programs between study team and adult day program demonstration project evaluation committee/ advisory committee (interview with program directors)	- Study Team - Discussions relative to standards between Study Team and Project Evaluation Committee - Study Team and Adult Day Program Demonstration Project Evaluation Committtee
2. To assess whether or not the program objectives are being met and to what degree		
2a. To encourage and support continued community living and independence of clients 2a.1. To improve and maintain the individual's level of physical, social, mental, and emotional functioning resulting in maintaining or increasing the level of independence	- Client Data Information (Client Data Collection Form) - Client - life satisfaction (Cantril's Self-Anchoring Striving Scale; Index of Well-Being; Quality of Life Index; Satisfaction with Day Programs Scale) - health status (Perceived Health Status; Quality of Life Index) - functional status (OARS; QOL Index) - Uninterrupted Home Management	- Study Team - Adult Day Program Demonstration Project Evaluation Committee - Sites
2b. To prevent or delay admission to a long term care facility or acute care hospital	- Client/informal caregiver opinion on institutionalization (Opinion on Institutionalization Form) - Caregiver Burden (Caregiver Burden Scale) - Uninterrupted Home Management - Admission/Discharge Data	- Study Team - Project Evaluation Committee - Sites

PRIMARY OBJECTIVES	DATA SOURCES (INSTRUMENTS)	RESPONSIBILITIES
2b.1. To conduct comprehensive multidisciplinary assessment and clinical investigations in the elderly client (Day Hospital)	- Interviews with program managers (Program Data Form) - Client Data (Client Data Form as well as types of investigations)	- Study Team - Sites
2b.2. To provide short term treatment directed toward improving and maintaining the client's level of physical, social, mental, and emotional functioning (Day Hospitals)	- Client Data (Client Data Form) - Client Information - life satisfaction (Cantril's Self-Anchoring Striving Scale; Index of Well-Being; Quality of Life Index; Satisfaction with Day Program Scale) - health status (Perceived Health Status; Quality of Life Index) - functional status (OARS; QOL Index) - uninterrupted home management	- Study Team - Sites
2b.3. To provide health support services which enable individuals to live in the community for as long as possible, preventing or delaying institutionalization (Adult Day Support Programs)	- Client Data (Client Data Collection Form) - Program Data (Program Data Form)	- Study Team - Sites
2b.4. To provide services within the continuum of long term care which complement and maximize the use of home care and other community service providers (Adult Day Support Programs)	- Program data from interviews with program managers (Program Data Collection Form) - Client Data (Client Data Collection Form)	- Study Team - Sites
2c. To facilitate discharge or aid in the transition from the long term care facility or acute care hospital	- Admission/discharge information - long term care (auxiliary hospital and nursing homes) and acute care - Interview with program managers	- Study Team - Sites - Directors of facilities - Home care case coordinators
2c.1. To provide transitional supportive services and follow-up care to the elderly in order to facilitate early discharge from acute care or long term care facilities	- Program data from interviews with program managers (Program Data Collection Form) - Client Data - qualitative interviews	- Study Team
2d. To assist families and other informal caregivers as they care for persons who may otherwise be at risk of institutionalization	- Caregiver Data (Caregiver Burden Scale) - Qualitative information from interviews with clients - Client opinion on institutionalization (Opinion on Institutionalization Scale) - Program data (Program Data Form)	- Study Team

SECONDARY OBJECTIVES	DATA SOURCES (INSTRUMENTS)	RESPONSIBILITIES
To contribute to the professional body of knowledge available with respect to policy issues, program issues and client/family/stakeholder issues	- All Data	- Study Team
To develop a minimum data set and monitoring indicators to be used to document program utilization and client characteristics over time in Alberta's Adult Day Programs	- Program Data (Program Data Collection Form) - Client Data (Client Data Collection Form)	- Project Evaluation Committee and Study Team

Chapter 2:
Review of the Literature



CHAPTER 2: REVIEW OF THE LITERATURE

The review of the literature on adult day programs provides a perspective on the nature of programs, current models for adult day programs, the effectiveness of programs in meeting the needs of the frail elderly, and the integration of programs into long term care programs. In this chapter, the following areas will be discussed: the historical development of the adult day program model of care for the elderly with particular emphasis upon Alberta, rationale for the day hospital, developments in long term care programming in Alberta, evaluation of the impact of adult day programs on clients, costs of programs, and caregiving issues.

THE ESTABLISHMENT OF ADULT DAY PROGRAMS IN ALBERTA: HISTORICAL PERSPECTIVE

Two day hospitals in Calgary and one in Edmonton were established in May, 1973 for the purpose of providing a health service for geriatric clients. The aim of this two-year pilot project was to determine whether or not the day hospital model would be a useful one in serving the health needs of geriatric clients. Initially, programs were begun in Calgary at the Crossbow and Glenmore Park Auxiliary Hospitals and at the Norwood Auxiliary Hospital in Edmonton. Few initiatives of a similar nature had been seen elsewhere in Canada prior to this time with the exception of programs in Montreal and Winnipeg. The model for the day hospital was derived from the United Kingdom (U.K.) where programs were established in the 1950's. Continued growth in National Health Service programs over the next two decades resulted in a rapid increase in the number of day hospital programs in the U. K. so that the number totalled some 150 programs by the mid-1970's (Brocklehurst, 1973). The nature of the service provided was focused upon treatment of an individualized nature at the outset and group social activities were not the focus of day hospital programs. The day hospital model where groups of patients were treated on an outpatient basis was one based upon psychiatry and began in the 1940's (Farndale, 1961). Differences in the organization and financing of health care and perhaps also in models of professional practice and service provision between the United Kingdom and Canada may well explain the proliferation of programs in the United Kingdom and the relative slowness of the idea to germinate in Canada.

An evaluation of the initial day hospital pilot project in Alberta was undertaken in 1976. A quasi-experimental time series design was employed in which patients and members of their families were interviewed at three different points in time--admission, discharge, and follow-up. It was concluded that "patients improved in health status - physically, mentally, and socially - during their period of attendance at Day Hospital" (Flathman & Larsen, 1976, p. 82). Consequently the researchers recommended that geriatric day hospitals should "gradually be extended in urban Alberta . . . adjacent to multi-level extended care facilities, for efficiency in service delivery and in utilization of personnel" (p. 98). Recognition of the need for social support led to the conclusion that "there is a need for social day care services, in order to maintain and supervise former Day Hospital and other patients, and to provide an alternative to long-term maintenance of social day patients in Day Hospitals" (p. 99).

RATIONALE FOR THE DAY HOSPITAL: PRACTICE AND RESEARCH PERSPECTIVES

The challenges for families and friends when an older person's health status becomes compromised by chronic and advancing illness are considerable. Choices made in a climate of desperation and exhaustion and in the absence of information about possible alternatives may not serve the best interest of either older people or of society. Williams, Franklin, Mill, Fairbank, and Knox (1973) studied the appropriateness of placement decisions and commented upon the need to have a range of available resources to assist older people to continue to live in the community in a home setting and to monitor their health status and progress in order to offset inappropriate placement decisions and unnecessary institutionalization.

A study to determine the "extent to which the day treatment would improve the health of the elderly living alone, and whether it would reduce the demands for admission to hospital" revealed that those who attended the day hospital had reduced rates of hospitalization and psychological depression compared to a control group (Woodford-Williams, McKeon, Trotter, Watson, & Busby, 1962, p. 242). There was improvement also in certain other measures: amount of sleep, agitation, personal cleanliness and self-perceived health. Brocklehurst (1970) also carried out an evaluation based on medical outcomes of a day hospital program in the United Kingdom. In this investigation, the group which was judged to have improved the most on the basis of medical criteria consisted of stroke patients where the improvement rate was 48%, followed by groups of patients with arthritis and chronic brain syndrome where the rates were 37% and 32% respectively. While these findings are of considerable interest, what is not known is whether the groups of elderly people studied in the U.K. could be considered comparable to those in Canada given the variations in the models of practice and health service in the two countries.

An Alberta study of rural non-institutionalized elderly people found that the "subjective responses of rural elderly subjects" supported "a profile of relative wellness and independence" even though many were coping with a number of chronic illnesses and about half had a need for assistance with activities of daily living (Kerr et al., 1982, p. 99). Of considerable interest was the finding that life satisfaction for these elderly Albertans was relatively high and "older senior citizens were no less satisfied with life than were younger ones, men no less than women, rural residents no less than residents of small towns, and those living alone no less satisfied with their lives than those living with another person" (pp. 99-100). However, the fact that more than one-third reported that their health was fair to poor and just under a third revealed that their health status had deteriorated over the past five years was of some concern and would lead to the conclusion there was a need for considerable health and social support among this group of elderly people, which if not met by their families or friends, would undoubtedly lead these individuals to seek out the resources offered by long term care institutions.

The impetus for the extension of day hospitals and the establishment of adult day support arose from the perceived success of day hospital programs, a growing movement to assist elderly people with failing health to maintain independent community living or sheltered community living, and in response to the mounting costs of institutional care. The rapid increase in the size of the elderly cohort in the population over the past few decades and the projected continued rise is of concern. In Alberta, it is anticipated that those over 65 years of age will have doubled between 1982 and 2006. Within this age group, the fastest growing sector is that of the very old or those who are 85 years of age or older, the group in which the principal users of long term care services are found (Seniors Advisory Council for Alberta, 1992).

Coordination of care for elderly people has been the subject of discussion and concern as the need for efficient and effective health care services for older people becomes more evident. According to Marshall, "the long term care system can only be called a system if it involves some degree of coordination" (Marshall, 1989, p. 112). It is apparent from the Mirosh Report (Committee on Long Term Care, 1988) that more than two dozen organizations and agencies are involved in delivering care to elderly people in the province. An attempt to address some of the issues which arise began with the implementation in 1990 of the "single point of entry" principle for admission to the long term care system in the province (Alberta Health, 1990). The establishment of a community-based assessment process relative to entering the system would seem to assure a community living rather than an institutional bias in decision-making.

OTHER RELATED DEVELOPMENTS IN ALBERTA

Alberta Health in a document entitled "Continuing Care Centres of Tomorrow: A Role Statement for Alberta's Long Term Care Facilities" has outlined the vision guiding the development of the long term care system in Alberta and suggests that the long term care system of the future "will offer not one standard program, but an array of services which clients will choose and use as their needs dictate" (p. 7, 1993), adult day programs being one of those services. A shift towards a greater emphasis on quality of life issues incorporating "social, intellectual, and spiritual needs" (p. 7) as outcome indicators has also been identified. Other major activities in the field of long term care include Alberta government initiatives over the previous 12 years including The Nursing Home Review Panel Report (1982), The Assessment and Placement Study for Long Term Care (Alberta Health, 1982), The Report of the Committee on Long Term Care (Mirosh, 1988) and the Alberta Patient Classification System for Long Term Care Facilities (Semradek et al., 1988). The evaluation of the Pilot Project for the Alberta Assessment and Placement Model for Long-Term Care Services assessed the impact of the implementation of the model in an urban and a rural region (Price Waterhouse, 1988). The development and implementation of the single entry assessment model based on a common assessment tool for long term care services represented a significant step forward in rationalizing and coordinating the existing system. In the document outlining the development of standards for adult day support and day hospital programs (Alberta Health, August, 1990), the philosophy and standards fundamental to existing programs and demonstration projects was underscored. Reports on an annual basis of the characteristics of clients in long term care facilities based upon the Resident Classification tool provide regularly updated information on the individuals who are users of the system. The research and development efforts undertaken in Alberta Health are important to the understanding and monitoring of the system of health and social services for the elderly in the province.

MODELS OF ADULT DAY PROGRAMS

Identification of models of adult day programs in the United States was the subject of several studies conducted by Weissert (1977; 1978; & 1989). In the earlier studies, two categories of programs were identified, namely those in which health was of primary interest and those which were focused mainly upon social activities and support. In that the sponsoring agencies were known to offer programs to different subgroups of the vulnerable population, the later study looked at the auspices under which programs were offered and established that case mix measures including activities of daily living differentiated between categories of sponsors of adult day programs. Three categories were subsequently identified: the Auspices Model I, the Auspices Model II and Special Purpose programs. Auspices Model I included programs offered by nursing homes and rehabilitation hospitals, while Auspices II models included those day programs which were offered by hospitals, housing authorities, senior centres, municipalities and freestanding programs. The Special Purpose category included programs offered for groups such as veterans, mental health clients, and those with special disabilities such as blindness and cerebral palsy. A Canadian study in British Columbia evaluated programs in that province and found that the predominant model was that of freestanding day programs (Gutman et al., 1993). Differences in the structure and financing of health care services between the United States and Canada may have resulted in different models for adult day programs in Canada.

EVALUATING THE IMPACT OF ADULT DAY PROGRAMS

There have been a number of studies evaluating the effectiveness of adult day programs since the inception of these programs. These have no doubt been primarily driven by the need to learn whether or not such programs have benefited older clients and their caregivers and whether it is possible to maintain or improve health and delay or prevent admission to a long term care facility for the frail elderly. However, other reasons for conducting such studies is to determine the usefulness of new programs in order to decide whether or not to continue offering them; to study how to improve program outcomes; to conduct comparisons of a number of programs in order to learn how they rank on particular dimensions of interest; and to elucidate matters of concern for policy development and planning to benefit consumers in the future. The present study incorporates most of these objectives, albeit the objectives for this study are expressed in more specific terms (see Table 1.1). Program evaluations may be limited by the fact that it is usually not possible to employ random selection and assignment of subjects to groups making the use of control groups and other methods of control difficult. This means that generalizability to a larger population may be compromised, and researchers are usually limited to providing information about specific programs further to which decisions must be made by policy makers. Data of a descriptive and qualitative nature have been sought from clients, caregivers, and program staff in some studies as a means of illuminating data from surveys and administration of standardized instruments to clients.

An important focus of evaluations of adult day programs have been assessments of the clients of the program. Caregiver assessments of programs have also been evaluated because of the importance of the client-caregiver dyad in maintaining the frail elderly in the community. Program managers and staff of adult day programs have also been the subjects of a number of studies in order to evaluate the nature, range, and effectiveness of services offered in adult day programs to clients and caregivers. The costs of programs are of concern to planners and policy makers as well as to those who are the potential users of the service and the general public. Central to the question of to what extent such programs should be an integral part of the health care system and funded by health insurance dollars, are the questions of efficiency and effectiveness of operations, costs incurred in various categories in day programs and accountability and cost control.

A comprehensive comparative study of adult day programs in British Columbia investigated models of service and the nature of services in 49 adult day programs, client characteristics in 22 of the centres, and reasons for referral to adult day care centres (Gutman et al., 1993). Findings revealed effectiveness of programs in meeting needs of clients, a relatively large number of freestanding programs in the community, open access to day programs by a variety of clients, and the provision of comprehensive services for clients of adult day programs in a large proportion of the centres. Other findings were that the average daily census in B.C. adult day centres was lower than in U.S. centres as identified in other studies (Conrad, Hanrahan, & Hughes, 1990; Weissert et al., 1989).

Another finding of considerable interest was that the average number of clients attending programs were considerably higher in the U.S. studies (just under 20 clients per day) than in British Columbia (13.6 clients per day). Also the average weekly days clients attended programs were considerably higher in the U.S. studies, where the average client attendance rate of 3.4 days per week was reported. This contrasted with the figure in B.C. centres of 1.7 days per client per week. A considerable number of adult day programs in the U.S. studies were associated with the programs offered by the Veterans Administration. Many of the latter were funded under the clear mandate of the federal government in the U.S. for the health of veterans. In that funding of community-based health initiatives such as adult day care does not fit well within the Canadian system of national health insurance with its focus upon acute, hospital-centred care, differences between the British Columbia and U.S. utilization rates may be explained. It is not known how many of the British Columbia adult day programs charged a client attendance fee, but such fees may well serve as deterrents to access to programs, particularly in Canada where citizens support the cost of health care through payment of taxes.

A randomized controlled trial of clients in a day hospital program was conducted at the Chedoke-McMaster Day Hospital in Hamilton, Ontario. The purpose of the study was to assess the impact of day hospital care or conventional care on health outcomes and use of health resources of 113 elderly clients who were randomly assigned to one of the two treatment conditions by geriatricians to whom they came for care. Results indicated that the control group demonstrated more favourable outcomes than the treatment (day hospital) group and the study team concluded that there was "little support for the hypothesis that care provided at geriatric day hospitals improves function or quality of life in the elderly" (Eagle et al., 1991, p. 704). Although the findings are interesting, if not perplexing, there may be other variables relative to the parameters of the program which are not evident. The description of the day hospital program in the report led to an impression of concentration on the physical health of clients rather than on social support and activity programs designed to maintain or improve self-esteem. It is possible that this or other variables such as the selection of clients by the geriatricians involved may have led to the admission of a client sample to the study who could not benefit substantially from the day hospital program. It may be also that day support programs may have been more useful to some subjects in the study than day hospital programs. Further, Lawton, Brody, and Saperstein (1991) have noted that the adult day program is a relatively diffuse intervention for which unrealistic outcomes may be expected of clients and caregiver participants. The limited time of attendance and the lack of other support services which might assist clients and their families to cope with the serious personal issues with which they were faced support this comment. It is noted that the McMaster study did not incorporate any program satisfaction measures, nor any qualitative interviews which might have given more of the personal perspective of clients and caregivers on the value of the program to them. A further issue is that of the difference between statistical significance and clinical importance in assessing outcomes.

Other controlled studies of day hospital attendance reported similar findings. A U.S. study in which patients were randomly assigned to five-day per week day hospital or in-patient hospital treatment and rehabilitation found no differences in health, functional, social, and psychological outcomes between the day hospital treatment group and the in-hospital control group (Cummings et al., 1985). In this study, the alternative to day hospital care was considered to be in-hospital care. The approach to the underlying philosophy of adult day care was again highly medical and short-term in focus. These researchers found that the costs of day hospital attendance were lower than those for the control group who were in-patients in hospital if the results were adjusted to reflect operation of the day program with a full complement of patients. Likewise Engedal (1989) compared outcomes of cognitively impaired clients in a day hospital group and control group and did not find significant differences on standard measures between the groups. Costs of day care were, however, found to be significantly lower than for the control group because of shorter hospital stays. The design of the study by Hedrick and colleagues (1993a; 1993b) was again a randomized controlled trial comparing outcomes of 668 patients in a number of adult day programs offered by the U.S. Veterans' Administration and other adult day programs. No significant client or caregiver outcomes for adult day care versus conventional care were identified. The findings did, however, reveal higher levels of satisfaction for day care clients and caregivers versus conventional care clients. Again, although these were carefully controlled studies, the focus appeared to have been almost entirely upon the physical and medical, and not upon variables relating to social support and self-esteem. All referred to the client as patient, a factor which perhaps underscores the concentration upon the medical and illness-focused aspects of care.

In a study of a small number of clients in one British Columbia adult day centre, clients and their families were interviewed during attendance at an adult day centre and three months following closure of the program in which health support was integrated with a strong program including "daily activities of exercises, games, crafts, social activities, outings" (Jackson, 1983, p. 349). The view of clients and their families was that their health and functional status as well as their social well-being had improved during the program and decreased following its closure when they were no longer able to attend (Jackson, 1983). In another evaluation, a research team evaluated day hospital psychiatric clients to find out whether "differences in treatment approach relate to differences in outcome measures of symptom reduction, community tenure and relapse" (Klyczek & Mann, 1986, p. 606). It was found that in comparing activity therapy with verbal therapy, "overall, patients receiving activity therapy achieved a much greater reduction in symptomatology, and this symptomatology translates to increased levels of independent functioning in community living skills" (p. 610). It is possible that the social interaction and interaction with peers is a powerful component of activity therapy which is not present to the same extent in verbal therapy.

A relative degree of consistency has been apparent in the findings of those who have studied the impact of adult day programs on clients and their families. The finding that day program attendance did not result in significant improvement in the physical functioning of clients over a one year period of testing by Weissert, Wan, Livieratos & Katz (1980) was one noted by others. An additional conclusion was that clients may have benefited from slight increases in the length of their lives. The need to find improvements in physical functioning in evaluating the impact of day programs on clients is perhaps unrealistic given the serious health problems suffered by these clients, health problems which have been central to their identification as frail elderly people. The finding of little or no deterioration in clients' states of physical functioning is possibly the indicator which should be used as the yardstick of success and even those outcomes may be unrealistic in some cases. If people are able to sustain their abilities to carry on activities essential to physical and social well-being, the appropriate conclusion may be that programs have successfully achieved the only realistic objective for these individuals - that of maintaining the status of their physical functioning. In a study of the impact of one program of adult day care operated by the Victorian Order of Nurses, Edmonton Branch, Strang concluded that "by maintaining clients' level of functioning, the process of deterioration is delayed and a degree of health promotion is achieved" (Strang & Neufeld, 1990, p. 19).

COSTS OF ADULT DAY PROGRAMS

A number of problems have been identified with studies which focus specifically upon costs of adult day programs. Two such problems include unstandardized expenditure categories between programs and variable efficiency levels of different programs. The latter may result from a number of conditions including the fact that the areas in which programs are located have different populations from which to draw and there may be factors causing differential referral of clients to different programs as well as differential willingness of clients to attend programs if barriers to attendance are present. It is further difficult to know all sources of care expenditures for clients, including costs of family caregiving. A related issue is the fact that it is difficult, if not impossible to put a price on the quality of life of individuals. Thus, the implications of adult day programs for improved quality of life for elderly clients raise questions of costs which are complex and have ethical and social overtones.

In a number of investigations of daily program costs, it has been concluded that adult day care is a more cost effective way of meeting the need of the frail elderly than care in a long term care facility (Osterman, 1986; Chodosh, Zeffert & Muro, 1986; O'Brien, 1977). In the study done by Gerard (1988), capital costs and costs of transportation were included in the cost comparison of three forms of day care--day hospital, day centre and social centre, and the conclusion was that day centre care was more cost effective that day hospital care, but less so than a social centre. However, Weissert's (1977) findings contradicted those of the previous studies. After surveying costs in ten day programs in the U.S., he claimed that average daily costs of day programs were considerably higher than those for nursing home care. Similar findings were reported by Mitchell, Wood and Harris (1976). More detailed comparisons carried out by Weissert (1978) found that day programs offered potential savings over the cost of nursing home care even when the costs of home support were factored in. Harder, Gornick, and Burt (1986) reviewed eight evaluations of day programs and concluded that because methodological rigour in cost analysis was lacking in half the studies, it was not appropriate to draw conclusions. In the large Adult Day Health Care Evaluation Study carried out in the U.S. Department of Veterans Affairs, it was concluded that "for the total group of patients enrolled, the total cost of care for those patients assigned to receive ADHC directly from VA was significantly higher than that for patients assigned to customary care" (Chapko, Ehreth, Hedrick & Rothman, 1993, p. SS62-SS63). In reviewing the nature of the experimental and control conditions, it seemed that there were many similarities. It was evident that there was a high level of day program attendance by clients and also that the focus of the day programs was medical treatment as opposed to social support.

Greene, Lovely, and Ondrich (1993) looked at the cost-effectiveness of community services for long term care clients in terms of the potential to deter or to substitute for nursing home care and used the individual as the unit of analysis. Findings revealed that "additional community services can work for many individuals - potentially reducing both their risk for institutionalization and their expected long-term care costs" (p. 186). Conclusions from the study also indicated that there is considerable potential for overall cost reductions for care using community services because "more cost-effective programs can in principle be operated on a reasonably large scale" and qualified by the fact that "community service programs require rigorous and systematic management of the resource allocation process if they are to achieve their potential for efficiency" (p. 186-187). There may also be some difficulty in generalizing from U.S. studies to the Canadian context, since the structure and financing of health care in the U.S. is quite different from that which is operational in Canada under a system of national health insurance.

CAREGIVING ISSUES

In order for very frail clients to benefit from the opportunity to continue with community living arrangements, the willingness of caregivers to provide the kind of support which is needed is a central issue. If the importance of giving the frail elderly the needed support to remain in the community is accepted, then it will be necessary to find ways of supporting and providing assistance to the caregivers who are critical to the process. The system of national health insurance in place in Canada since legislation was originally passed in 1957 and 1968, is focused primarily on acute, in-hospital care and physician-centred treatment. This system has historically provided incentives for institutional and not for community-based care. For instance, home care programs providing nursing, rehabilitation and other health services in the home only got underway in earnest when provinces agreed to provide funding to support them since they were not covered under federal-provincial cost-sharing arrangements. This contrasts with in-hospital care where virtually all expenditures for patients are reimbursed.

In relation to the frail elderly, there were very few incentives to encourage or enable families to take on the care of their elderly family members. That a good number of families did so is testimony to their commitment to the senior members of their families as well as to their altruism. There are a number of aspects of caregiving which must be looked at. Prominent among these is respite or relief for caregivers who spend a great deal of their time looking after a dependent relative and who need to have some assistance to relieve the burden they are carrying and to allow them some time apart from the client. There is concern for the health of some caregivers, many of whom are elderly themselves. Some caregivers have given up their employment and thus their potential for remuneration and have also sacrificed pension credits in order to provide care on a part or full-time basis to relatives. Another aspect of caregiving which must be addressed is incentives to encourage those who might not otherwise take on this role, to feel that they are able to do so if support is available.

When elderly people become frail and are in need of assistance, they are most likely to turn to other members of their families for support (Gee & Kimball, 1987). Women who are spouses and daughters are the most likely persons to provide care in such situations. It has been well-established that among the children of elderly people, daughters are much more likely to actually provide care than sons (Boaz & Muller, 1992; Brody, 1981; Chappell, 1991; Chappell, 1990; Guberman, Maheu, & Maille, 1992). This has put women in the "middle" in a highly unique and stressful position as they strive to do what is expected of them, that is to be good parents to their children, providers for their families and caregivers for their elderly family members (Brody, 1981). As health and social care systems downsize to respond to widespread perceptions of the need for deficit reduction, the elderly are the group affected to the greatest degree. Although the feminist movement has given women increasing independence and the opportunity to move outside the home into the workforce, current experience would seem to suggest that women's domestic responsibilities are increasing as a result of both demographic trends and social policy decisions. Historically women have been the caregivers in families and although there is some movement in society to accept men in nurturing roles, to date caregiving remains the domain of women. Friends may also be serving in a caregiving role, paricularily when the care receiver lives alsone (Chappell, 1991).

The complex issues relative to the care of the frail elderly and the women who are their primary informal caregivers are important ones which are not easily resolved. The dilemmas facing these people are greater than the individual situations they represent, for the worth placed upon older people and upon women in the society are fundamental and overriding issues and must be central in the public policy debate. The issue of caregiving for the elderly represents more than a fiscal crisis. The moral and ethical issues relating to frail older people and their optimal treatment are important components of the public policy debate.

Strang and Neufeld (1990) considered the outcomes of respite care to be "illness prevention and health promotion intervention for both caregivers and the older persons dependent on them" (p. 16). In an evaluation of the impact of a VON day program upon caregivers, they concluded that "the relief provided to caregivers supported them in remaining in the caregiving role" (p. 18). The ability of families with an elderly relative with dementia was the concern of Graham (1989) who noted that "the majority [of families], if a caregiving network and/or community support are not available, will experience unmanageable levels of stress and ultimately seek nursing home placement" (p. 27). Gaynor (1990) found that women who were in caregiving roles for a longer period of time experienced greater physical health problems than those who had not, while younger women experienced more psychological distress than older women.

A study of 46 caregivers' perceptions of facilitators and barriers to the use of community services revealed that although caregivers reported a high level of satisfaction with services, they nevertheless raised a number of concerns. The latter were categorized as problems with quality of care, lack of control over scheduling and system-level inflexibility (MaloneBeach, Zarit & Spore, 1992). It was noted that "as a result of these problems, many caregivers became frustrated and some dropped out of the service system altogether" (p. 153). Since it is likely that only the most committed of caregivers are likely to take on the role, knowledge of factors which encourage family members and friends to take on caregiving roles is very important. In this study, caregivers also underscored the need for more information about community resources and the eligibility of the client for service. Finally, from the perspective of the caregiver, "an important aspect of satisfaction was having a special relationship with someone in the service system" (p. 155). It is interesting that although this sometimes was the program manager, this was not always the case, as the person identified was often the individual providing services or care. It is clear that caregivers need to feel that they have some control over the service system and that a person giving support at a personal level provides meaningful assistance to them. In commenting on caregiver strain, Lawton, Brody and Saperstein (1991) asserted that the "social and mental health costs to caregivers" include "isolation; emotional problems (such as anxiety, depression, guilt, and insomnia); restrictions on family social and household activities; strained family relationships; exhaustion; despair; loneliness; loss of time from work; and economic problems" (p. 7).

Caregiver burden has been assessed in a number of studies. In a large study of 256 caregivers of elderly people over 70 years of age, it was found that "those who felt that their caring role caused them high levels of stress were more likely to envisage circumstances under which they would be unable to continue care-giving, more likely to say that they would accept institutional care for their dependants" (Jones & Salvage, 1992). In an examination of the relationship between caregiver burden and the use of long term care services, it was found that caregiver burden served as a predictor of both the use of home care and of nursing home placement (Brown, Potter & Foster, 1990). It was concluded that since caregiver burden was the most significant factor in identifying those who would use formal services, it should therefore be measured through assessment of the client-caregiver dyad.

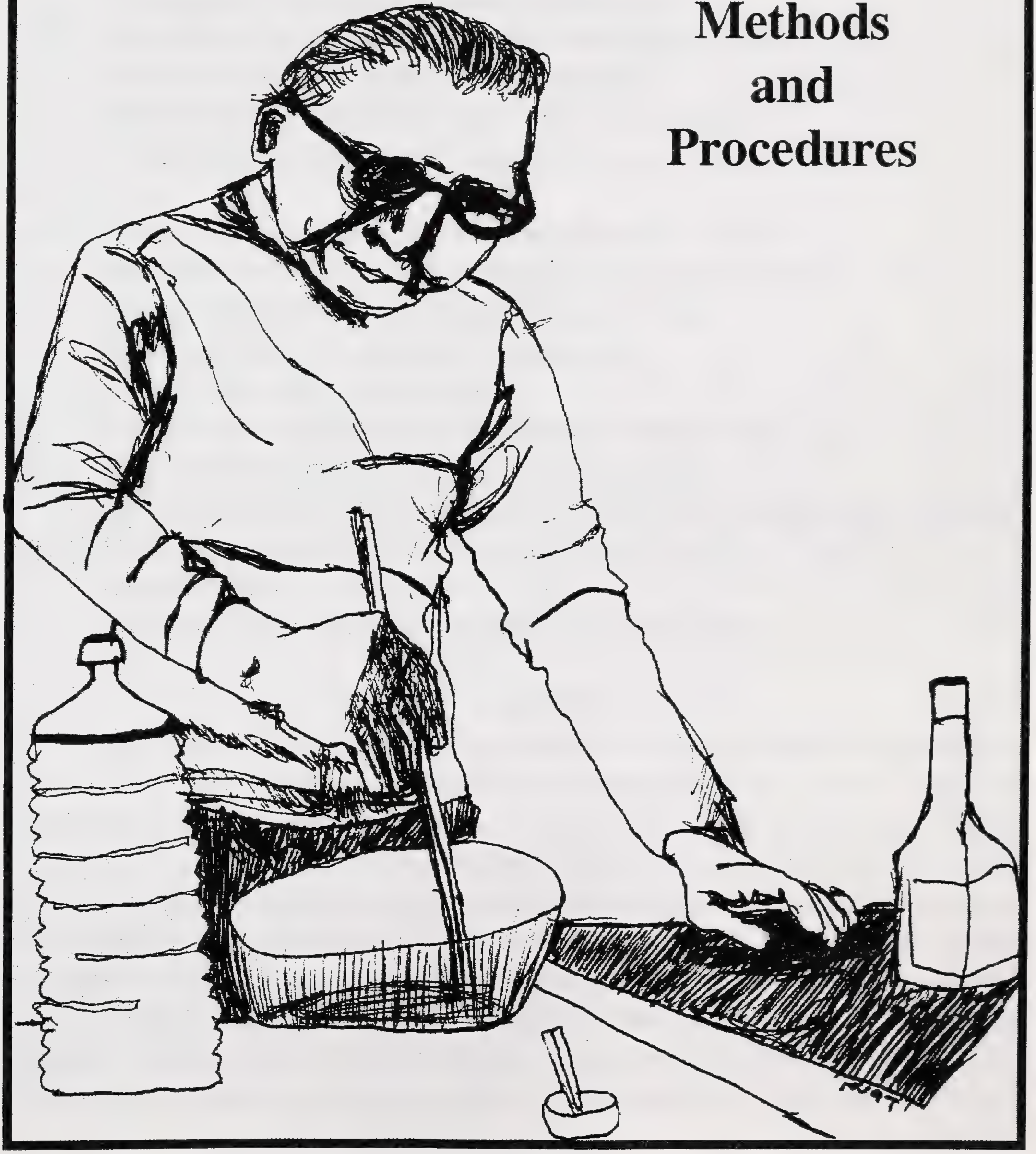
The effect of support groups in assisting caregivers to cope with caring for an individual has been evaluated in a number of studies. In a study of 36 caregiver-survivor dyads following stroke, Printz-Feddersen (1990) failed to find significant differences in caregiver burden or depression between those who received and those who did not receive the group process treatment. The difficulties encountered in the study with a high attrition rate, small sample size and weak intervention may have been factors in the results obtained. However, Greene and Monahan (1989), using a professionally guided and carefully designed caregiver support group program offered to 289 caregivers over an eight-week period, found "statistically significant reductions in anxiety, depression and sense of burden among family caregivers to frail elderly persons living in the community" (p. 472). Conclusions from this study were that it was possible to effect significant reductions in anxiety and depression in a caregivers exhibiting high degrees of burden using a support group intervention.

SUMMARY

In this review, the historical development of adult day programs in Alberta has been traced and initiatives of the Alberta government in long term care programming over the past decade and a half have been identified. The results of studies which have evaluated the impact of adult day programs have been presented and issues relative to the research and the context within which the research was conducted have been discussed. Major cost studies which have evaluated the cost effectiveness of a variety of programs have been addressed and difficulties in relation to a meaningful cost analysis of day program operations have been put forward. Caregiving issues which have emerged from studies of day programs have been put forward. The body of literature which is available on adult day programs is growing and a great deal can be learned from studies of programs in international settings as well as those which have been conducted in the Canadian context. The literature provided a valuable basis for the approach taken in the present study and for the development of the research design and methods used.

Chapter 3:

Methods and Procedures



CHAPTER 3: METHODS AND PROCEDURES

SETTINGS

The five day hospital programs included in the evaluation study of adult day programs were as follows:

- Dickinsfield Day Hospital, Edmonton (Comparison)
- Medicine Hat Regional Hospital, Medicine Hat (Demonstration)
- St. Michael's Hospital, Lethbridge (Demonstration)
- Youville Psychogeriatric Day Program, Edmonton (Comparison)
- Youville Geriatric Day Hospital Program, Edmonton (Comparison)

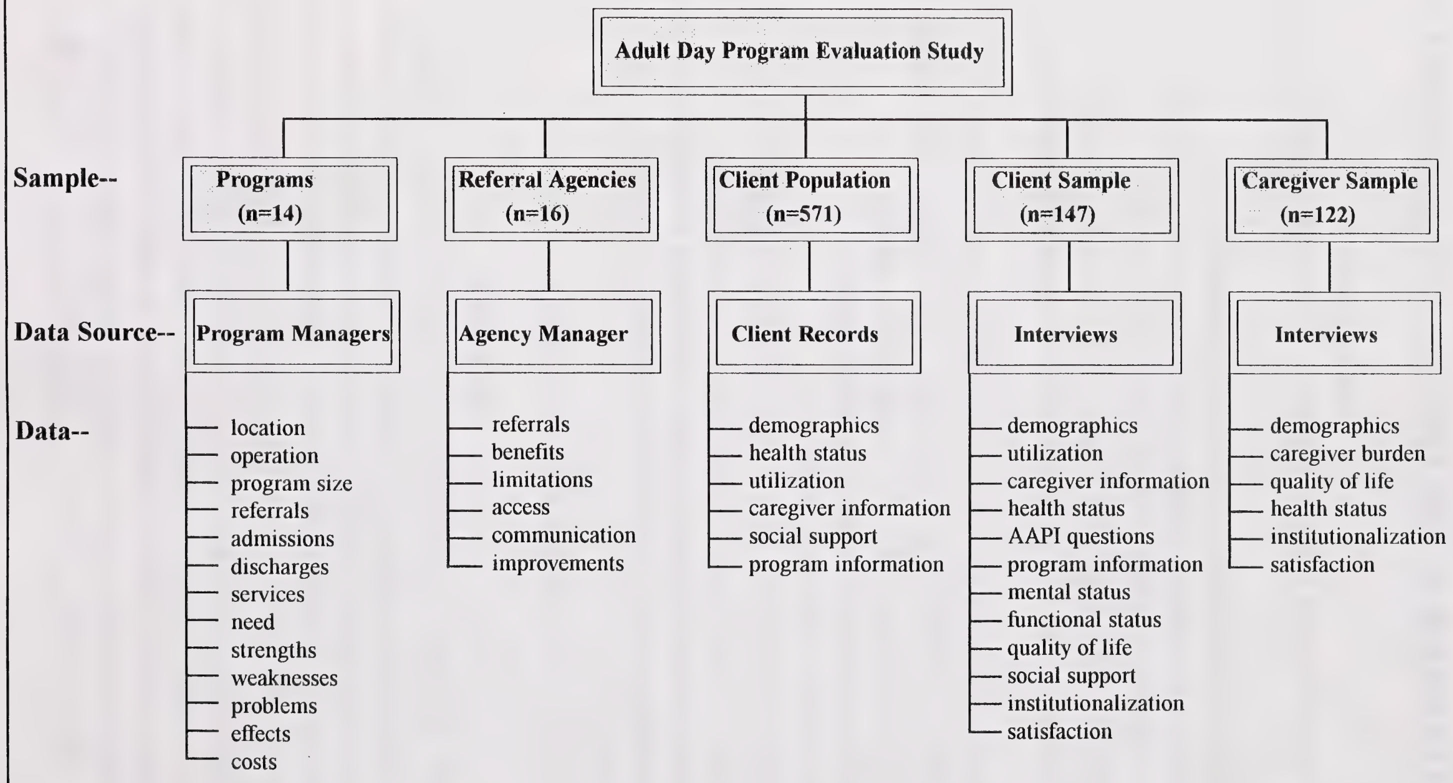
As well, nine day support programs were included in the study as follows:

- Association of Adult Day Support Programs, Edmonton (Comparison)
- Club 36, Alzheimer's Society, Calgary (Demonstration)
- Foothills Health Unit, High River (Demonstration)
- Kerby Centre, Calgary (Comparison)
- Mountain View Health Care Centre, Didsbury (Demonstration)
- Rosehaven Day Support Program, Camrose (Comparison)
- Thorhild-Westlock Auxiliary Hospital and Nursing Home, Westlock (Demonstration)
- Vegreville Auxiliary Hospital and Nursing Home, Vegreville (Demonstration)
- Victorian Order of Nurses (VON), Lethbridge (Demonstration)

SAMPLE

Data for this study were obtained from a variety of sources (see Figure 3.1). Managers or directors of these adult day programs were asked to take part in the study to provide a descriptive profile of the various programs. Referral agency managers were asked to respond to a questionnaire detailing their experience with adult day programs. Information from client records was collected to describe day program clients. Clients from each of the eight demonstration day hospital and day support programs in the province and the six selected established day programs in the province were asked to take part in a series of interviews over time. Each client was asked to identify a primary informal caregiver who was also requested to participate in the study. In the larger programs, a stratified randomly selected sample of clients/caregiver pairs from each centre was interviewed. The sample was stratified to represent the proportion of clients under and over 50

Figure 3.1 Adult Day Program Evaluation Study Data Collection Process



years of age at each program. In programs with a large percentage of clients without caregivers, an additional five clients without caregivers per site were requested to take part in the study. In smaller programs, every client who entered each program during the course of the study was asked to participate.

PROCEDURE

Baseline data were collected through an initial visit to each site. The program director or manager was interviewed to obtain descriptive data relating to the program, and demographic data about the clients was collected from the files for each client served by the particular day program. These data served to describe the clients, the programs, and program costs and utilization. Information about program outcomes was obtained through the use of other instruments directly from clients and their caregivers using interview methods. Instruments measuring the client's health status, functional status, life satisfaction, and satisfaction with the program were administered to clients. Informal caregivers were also asked to rate their life satisfaction, subjective burden, opinion on institutionalization and satisfaction with the program.

As control was important to the design of the study, each of the instruments was administered to clients at five time intervals; interviews were conducted at two points in time prior to admission (two months prior to admission and immediately prior to admission) and at three points following admission (immediately following, two months later and six months after admission to the program). Caregiver reports on life satisfaction, subjective burden, and opinion on institutionalization were also sought at these times. In this way clients and caregivers were used as their own controls. Clients and caregivers were interviewed separately in a private room, and the instruments were completed in writing by the client/caregiver, if possible for them to do so. The instruments were reprinted using a large type font, so that elderly clients and caregivers were able to read them more easily. If the client or caregiver had difficulty with or was reluctant to complete the questionnaire independently, the researcher verbally administered the questionnaires.

A purposive sample of clients and caregivers representing different programs, genders, ages, and with varied relationships to each other were asked to participate in a qualitative component of the study since structured instruments do not always provide a holistic picture of a situation. Therefore, unstructured interviews were employed to elicit further data relating to the caregiver and client experiences in the program. The guiding questions were: "Tell me about your experience in the day program," and "What effect has the day program had on your life, and the lives of your family and friends?" These interviews took place at the time of the last interview in the time series and took approximately one hour. Clients and caregivers were allowed to speak at their own pace and address whatever aspect of the program they chose. With the permission of the clients and caregivers, these interviews were tape recorded and transcribed. The data were analyzed for their content and described in terms of specific themes that arose.

ETHICAL CONSIDERATIONS

Ethical clearance for the project was obtained from a duly constituted ethics review committee of the Faculty of Nursing at the University of Alberta. All participants in the study were told that the purpose of the study was to evaluate adult day programs. All participants were guaranteed confidentiality and anonymity. Only code numbers appeared on data collection forms. All information was kept in a secure area, to which only the research team had access. Participants were assured that their names would not be included in any reports of the project. The names of the programs were not included in any identifying way in the evaluation.

All participants were informed that their participation in the study was voluntary and that there would be no repercussions should they decline to participate. They were given the right to withdraw from the study at any time without penalty and were able to refuse to answer any questions. Participants in the study were told that they could withdraw from the study by informing one of the investigators, in person at the time of the interview, or at any time by telephone. Each participant was given a copy of the consent form in order to contact the investigators at any time.

There were no anticipated risks to the participants in the study. However, it was decided at the outset that during the course of the study, should the investigators become aware of information that a client or caregiver has been physically or emotionally harmed, it would be necessary to report their findings to the appropriate persons. In such a case, the participant(s) involved would be notified that the investigators were taking this action.

Informed consent forms were signed by all participants in the study (see Appendix A). The manager/director of the program was approached initially to obtain approval to conduct the study in the setting and to elicit his/her participation in the study. The manager/director or designate explained the purpose of the study to the clients. Names of willing participants were then forwarded to the researchers. Clients were asked to approach their informal caregivers regarding caregivers' participation in the evaluation. If they were willing to participate, the client would provide the caregiver's name and telephone number to the program director to be forwarded to the researchers. If clients were cognitively impaired, consent for their participation in the study was sought from their informal caregivers.

INSTRUMENTS

The following instruments were used in this study: Client Information Form; Program Data Form; Satisfaction with Day Program Scale; Self-Anchoring Striving Scale (Cantril, 1965; a measure of life satisfaction); Index of Well-Being (Campbell, Converse & Rodgers, 1976; measuring life satisfaction); Quality of Life Index (Spitzer et al., 1981; measuring health status, functional status, outlook, and support); Perceived Health Status; Multidimensional Functional Assessment: Older Americans' Resource and Services Questionnaire (Duke University Center for the Study of Aging, 1978; measure of functional status); Memory and Behavior Problems Checklist (Zarit & Zarit, 1983); Mini-Mental Status Questionnaire (Kahn, Goldfarb, Pollack & Peck, 1960); Social Relationship Scale (McFarlane, Neale, Norman, Roy, & Streiner, 1981); Caregiver Burden Inventory (Novak & Guest, 1989); and Caregiver/Client Opinion on Institutionalization.

The Program Data Form (Appendix B), the Client Information Form (Appendix C), and the Satisfaction with Day Program Scale (Appendix D) were instruments designed for the purposes of this study. To establish face and content validity, these instruments were circulated to members of an expert panel consisting of four health care professionals working with elderly clients and four health care researchers. The experts were asked to indicate whether each item was clear, meaningful, reasonable, and acceptable. As well, they were asked to indicate whether the instrument as a whole was appropriate to meet the study objectives. Seventy percent agreement amongst the experts was required for the item to be included in the final version of the instrument. The instruments were revised and retested until this level of agreement was attained. The client information form and program data form were then pretested in two adult day programs not included in the study. Also included on the client information form were several items from the Alberta Assessment and Placement Instrument (AAPI), a tool developed by Alberta Health (1989). The AAPI is a comprehensive health assessment tool used to determine appropriate referrals and placements for long term care clients which also addresses mental and psychosocial status. No reliability or validity figures are available for the current version of the AAPI.

The Satisfaction with Day Program Scale, a measure of client satisfaction developed for the study, was also tested for stability reliability in the pilot study in a day program not included in the study. Twenty clients and their informal caregivers were asked to complete the instrument on two occasions, six weeks apart. A test-retest reliability above 0.80 was considered to be acceptable. An alpha coefficient for internal consistency was also computed. For clients the Cronbach's alpha coefficient achieved was 0.81, while for caregivers it was 0.63.

The Self-Anchoring Striving Scale (SASS; Appendix E) and the Index of Well-Being (IWB; Appendix F) were instruments designed to measure satisfaction with life. Both are brief, easy to use, and have received extensive testing for reliability and validity. The SASS consists of a ladder with rungs which depict the best to worst possible life. Individuals identify where they believe they are on the ladder, thereby indirectly reflecting their satisfaction with their lives. The scale has been used in 13 countries including Canada and the U.S. The stability reliability for this measure was 0.79 with a small sample of patients with end stage renal disease (Molzahn, 1989). The SASS was also moderately correlated with other measures of life satisfaction, suggesting concurrent validity (Molzahn, 1989).

The IWB was designed for a national survey of the quality of American life. It is an eleven item seven-point semantic differential scale. Ten items are bipolar adjective pairs (such as boring versus interesting; full versus empty) and the last item is a measure of overall satisfaction with life. The stability reliability on various items over an eight month period was found to range from 0.42 to 0.67 (Campbell et al., 1976). The alpha coefficient for internal consistency was found to be 0.91 (Molzahn, 1989). Correlations with other measures of life satisfaction are in the 0.5 range (Evans et al., 1985; Molzahn, 1989), providing some evidence for concurrent validity of the measure.

The Quality of Life Index (QOL Index; Appendix G) was initially developed to measure the quality of life of cancer patients, and has since been used in a variety of patient populations. The instrument is brief, easy to use and consists of five items measured on a three point scale. The items include measures of the following: activity, daily living, health, support, and outlook. The dimensions of health, activity, and daily living were used to help validate the other measures of health and functional status, and to provide data relating to social support and outlook of the clients.

The perceived health status (PHS) of the client was assessed by asking for a subjective report of current health and that of five years ago (Appendix H). This method was used by a number of investigators and has been shown to be a reliable indicator of health status from the client's perspective (Kerr et al., 1982; Roos & Havens, 1991).

The Multidimensional Functional Assessment (OARS; Appendix I) includes subscales which measure patients' physical impairment including instrumental and physical activities of daily living (Duke University Center for the Study of Aging, 1978). The OARS instrument elicits a rating of the individual's ability to perform various tasks on a three-point scale--"without help," "some help," and "completely unable." Test-retest reliability is reported by the authors at 0.71 for instrumental and 0.82 for physical activities of daily living.

As it was recognized that cognitive impairment would be an important factor in the determination of appropriate program decisions for an elderly person, a measure of cognitive functioning was selected for use in the study, the Canadian adaptation of the Mini-Mental Status Questionnaire (Appendix J). The Memory and Behavior Problems Checklist (Appendix K) was also completed by caregivers of cognitively impaired clients. This instrument provides documentation of the frequency of a number of memory and behavior problems often seen in the cognitively impaired population. Guttman split-half reliability was reported by the authors of the instrument to be 0.65 while the test-retest reliability coefficient was reported as 0.80.

The Mini-Mental Status Questionnaire (Kahn et al, 1960) is a brief and easy to administer tool comprised of 10 items such as "What is the date today?". This instrument has been widely used as an indicator of mental status. In a study of older adults by Roos, Havens, and Black (1993), just over 70% of those aged 65 and over received a score of 9 or 10 indicating no cognitive deficiencies on the questionnaire.

The burden carried by the caregiver was assessed using the Caregiver Burden Inventory (CBI) developed by Novak and Guest (1989; Appendix L). Caregivers' expressions of their feelings about the impact of the client's disabilities on their lives are rated for 24 items on a five-point scale. Novak and Guest reported that internal consistency ranged from 0.73 to 0.86 for the five subscales of caregiver burden measured by the instrument (1989). The five subscales included time dependence burden, physical burden, developmental burden, social burden, and emotional burden.

Further to subjective burden as reported by caregivers, it was thought to be prudent to measure the drive to institutionalize on the part of the caregiver. This was done by posing a single question (Appendix M). Clients were asked to rate their own feelings about institutionalization and to rate their caregivers' feelings as well (Appendix M).

The Social Relationship Scale (McFarlane et al., 1981) was used to assess the quality and quantity of social support perceived by both clients and caregivers (Appendix N). Participants were asked to identify the number of individuals with whom they would discuss six categories of information--family, financial, health, work-related, personal, and societal issues. They were then asked to rate the helpfulness of these discussions for each individual that they have named. Test-retest reliability reported by the authors ranged from 0.62 to 0.99 with a median of 0.91 over a one week interval in a sample of 73 college students for the quantity of social support (the number of individuals recorded in each of the six categories). The average helpfulness score test-retest reliability correlation coefficients ranged from 0.54 to 0.94 with a median of 0.78 (McFarlane et al., 1981).

PILOT STUDY

All instruments were pretested with a sample of 20 clients from adult day programs not included in the study. The clients were asked to complete the instruments on two occasions, six weeks apart. A test-retest reliability of 0.80 was considered to be acceptable. An alpha coefficient for internal consistency was computed for the QOL Index, IWB, OARS, CBI, and Satisfaction with Program Scales. A correlation matrix was generated between all measures and a multi-trait multi-method procedure was used to examine construct validity of the measures. Each of the instruments met or nearly met the acceptable limits of test-retest reliability, with the exception of several of the AAPI questionnaire items, specifically the measures of ineffective coping, elimination, and management of urinary and bowel elimination. In response to the results of the pilot study, several adaptations to the Satisfaction with Program Scale were made in an attempt to improve its reliability. Questions which referred to the care provided by specific disciplines was omitted and instead staff were referred to in general.

DATA ANALYSIS

All data were entered into the SPSS for Windows package and data analysis included obtaining frequencies for all variables along with appropriate measures of central tendency and dispersion. Where instruments were administered to clients and caregivers at specific times before and after entry to the program in a time series design, one-way analysis of variance with repeated measures was employed to analyze changes over time with each of the client and caregiver groups. Only grouped data was reported, and it was decided at the outset not to report outcome data relating to any specific program. Qualitative data were summarized in terms of specific themes that arose.

ISSUES IN DATA COLLECTION

Throughout the course of the study several issues arose which affected the data collection process and resulted in minor modifications in data collection and analysis procedures. A discussion of these issues is necessary to provide a background for interpreting and discussing the results. As well, other researchers may find the discussion useful when planning and implementing future evaluation projects of a similar nature. The issues to be addressed include "contamination", limited number of referrals, special populations, emotional responses of participants, confusion about the role of interviewer, and attrition.

Contamination

One of the issues which needed to be addressed was the contamination which occurred when one client moved from one day program to another during the course of the study. In some locations, it was common for participants to move from one day program to another, most often from a day hospital program to a day support program. This movement made it difficult to evaluate the unique effect of a particular program on the client and caregiver. To deal with this problem, clients who had recently attended another day program were excluded from the sample. However, if clients transferred to another day program during the course of the study they remained a part of the study group. In the data analysis, if numbers warranted this group of clients would be treated separately. In the selected client sample, who were followed over time, this situation only occurred on three occasions. Therefore in the final analysis these individuals were treated as part of the total sample and for the purposes of comparison were included in the group which represented the first program they had attended.

Too Few Referrals

In several of the programs due to their client referral and/or turnover rates, it was not possible obtain the full complement of 10 client-caregiver pairs in the proposed three month intake period. A few of the programs, particularly those in rural areas where the potential client population was dispersed and transportation was a more difficult issue, there were openings in programs, but referrals were slow to come. In other programs, there were no openings for new clients, and turnover was very low. In these situations, the client intake period was extended by several months in an effort to obtain the proposed sample size. Over-sampling at other sites was completed in an effort to compensate for the smaller samples in some programs.

Special Populations

The cognitively impaired client without an informal caregiver posed some distinct problems with respect to the information desired for the study. Wherever possible, a next of kin was contacted to obtain permission for the client to be involved in the study and to secure as much information about the client as was possible. If no family contact was available, clients in this category were excluded from the study. Another population which posed some difficulty were psychogeriatric clients, who although cognitively intact, may have suffered from other psychological problems. With certain of these clients, participation in the study would not be beneficial and might have created additional stress. These clients were approached only after they had been in the program for a few weeks, and staff at the program had assessed their suitability for inclusion in the study.

Emotional Responses

The interviewers found that some questionnaire items within the instruments evoked strong emotional responses in certain client-caregiver situations, ranging from sadness and tears to voiced anger and frustration. For some of the clients and caregivers it may have been the first time that they had assessed their current life situation in a structured manner. For instance, the Self-Anchoring Striving Scale asked clients and caregivers to rate their quality of life now, last year, in their best year, and to predict where they would be next year on a scale of 0-10. A few of these participants reported marked deterioration, and it seemed that seeing this deterioration in "black and white" on paper created for some a distressing situation where they had to confront their changes/losses for the first time. The questions concerning admission to a long term care facility and the caregiver burden questionnaire also evoked some strong reactions. Sometimes clients and/or their caregivers believed that this question was asked because the researchers thought they should be in an institution. Additional explanation and discussion about the purpose of this specific question helped to diffuse some of the anxiety it evoked. With the caregiver burden questionnaire, several caregivers took offense to certain questions such as those asking if caregiving had affected their marriage or relationships with other family members or if they resented or were ashamed of the person for whom they provided care. If after further discussion, caregivers continued to feel uncomfortable, they were reminded that they were not required to complete questions that they did not wish to.

Interviewer as Resource Person

Each of the interviewers was a nurse, and clients and caregivers were aware of their nursing background. In the course of completing the interviews, advice about health issues was often sought. As most clients and caregivers were seen in their own homes, the interviewers sometimes discovered health hazards and risks. Certain clients and caregivers had difficulty separating the interviewer's role from that of a health care provider. It was also difficult at times for the interviewers to keep these roles separate. Most often the interviewers recommended that the client bring their concerns to the attention of day program or Home Care staff, if appropriate. This issue should not have any bearing on the quality of data collected.

Attrition

In the pilot study, refusals to continue participating in the study were a considerable problem. In the final study, after being interviewed on one or more occasions, less than 10 percent of clients or caregivers refused follow-up. It was difficult to identify the reason for refusal to permit follow-up in all situations. Clients or their caregivers most often reported not having enough time or not being interested in the study as reasons for withdrawing. Morbidity and mortality due to the frailty of the target population, however, was a more considerable problem and reduced the final sample size by approximately 30 percent.

Administration of Instruments

Each of the instruments was relatively short and easy to administer to cognitively intact clients. It was helpful to place rating scales in enlarged type on a separate page for the Index of Well-Being, the Self-Anchoring Striving Scale, the Memory and Behavior Checklist, and the Social Relationship Scale, so that clients/caregivers had the option of stating or pointing to the response that best represented their feelings/beliefs. Few clients or caregivers had difficulty understanding either the purpose of the instruments or instructions on how to complete them. Those who did not have a strong command of the English language had some difficulty understanding the adjective pairs on the Index of Well-Being. Only the Mini-Mental Status questionnaire was suitable for direct administration to cognitively impaired clients.

ISSUES IN DATA ANALYSIS

Multiple Testing

The possibility of finding Type 1 errors, that is, finding a significant difference by chance when there is no real difference, is a concern when multiple testing has been utilized. When interpreting the results in a study such as this one, this should be a consideration. Significant results should be evaluated in terms of their practical signficance and based on logic. Lower p values are more likely to represent real differences.

Missing Data

If responses to individual items in a scale were missing, an average score based on the responses to other items in the scale was calculated and used to compute a total score. For single items where data was missing, it was recorded as missing and was not included in further analysis. When analysis of variance with repeated measures was used, only those participants with scores on all of the selected time measurements were included. Because of small numbers at Time 1 and Time 2, these scores were not included in the analysis of variance with repeated measures calculations. Missing data, as a result of attrition, significantly reduced the final sample size.

Power

Power is a function of a) the significance level; b) the sample size; and c) the effect size. A power analysis was completed post hoc for the variables measured across time. The significance level for this study was set at $p<.05$. Sample size varied according to the variables being measured. The conventional standard for power is 0.80 which sets the risk of Type II error, wrongly accepting a false null hypothesis, at 0.20. Power analysis results were included in the data analysis sections where appropriate, that is those situations where changes over time appeared to have clinical or practical significance, but statistical significance was not achieved.

Chapter 4:
Description of Programs

CHAPTER 4: DESCRIPTION OF PROGRAMS

SELECTING THE PROGRAMS

Eight adult day program sites which were funded as demonstration projects by Alberta Health participated in the study. Six other programs were included as comparison sites. The comparison sites were selected on the basis of their model of care, geographical location, and interest in participating in the study. Of these fourteen sites, nine were classified as day support programs and five were classified as day hospital programs; five were located in rural areas and nine in urban centres. Half of the programs were physically located within the walls of a long term care facility. Table 4.1 provides a breakdown of the fourteen programs in the study by model of care, program type, and geographical location. Throughout this chapter, comparisons between programs are made by model of care (day hospital/day support), program type (comparison/demonstration), and geographical location (rural/urban). Two other day program sites participated in the pilot investigation.

Table 4.1 Description of Programs

Program	Model of Care	Program Type	Geographic Location
A	Day Support	Demonstration	Urban
B	Day Support	Demonstration	Rural
C	Day Support	Demonstration	Urban
D	Day Support	Demonstration	Rural
E	Day Support	Demonstration	Rural
F	Day Support	Demonstration	Rural
G	Day Hospital	Demonstration	Urban
H	Day Hospital	Demonstration	Urban
I	Day Support	Comparison	Urban
J	Day Support	Comparison	Urban
K	Day Support	Comparison	Rural
L	Day Hospital	Comparison	Urban
M	Day Hospital	Comparison	Urban
N	Day Hospital	Comparison	Urban

PROGRAM INFORMATION

A questionnaire was designed to elicit information about each day program in the study and was completed by program managers or their designates at each of the adult day program sites (see Appendix B). A program consent form was completed by program managers. Open-ended questions were analyzed for themes. Frequencies and other descriptive statistics were calculated for closed-ended questions using the SPSS for Windows software package. Due to the small sample size of 14 programs, the calculation of significant differences between programs would not be meaningful, instead descriptive information is reported. Where information has been presented about individual programs, each has been referred to by a letter in the alphabet. Although individual programs may be able to identify their own program, this step has been taken in order to preserve anonymity. The order within the tables does not match the listing presented in the settings portion of Chapter 3.

DESCRIBING THE PROGRAMS

Models of Adult Day Programs

Two basic models of adult day care were represented by the day programs included in this study, day hospitals and day support programs. Day hospitals had a more intensive physical and rehabilitational focus and typically client stay was short, being of a few months duration. Day support programs focused on the socialization needs of clients and provision of respite care for informal caregivers. There was no maximum length of stay for clients, and some clients remained in programs for a number of years. Five of the day programs seemed to best fit the day hospital model of care and nine were more representative of the day support model.

Location of Programs

Geographical Location

Five of the adult day programs were located in predominantly rural communities, while nine were located in larger urban centres. All of the day hospital sites were located in urban centres, while four of the nine day support programs were in urban centres (see Table 4.2). The location of adult day hospitals only in urban centres holds implications for rural seniors. Due to transportation issues, lengthy travel time, and associated increased costs, some rural elders who could benefit from day hospital services may not be receiving all of the rehabilitation and health assessment services from which they might benefit. This situation is not unique to Alberta and is applicable in many other areas of the country as well.

Table 4.2 Location of Adult Day Programs

Model of Care	Geographical Location	Physical Setting
Day Support	4 urban	3 Senior Centres
		1 Renovated Warehouse
	5 rural	4 Long Term Care Facilities
		1 Duplex
Day Hospital	5 urban	4 Acute Care Facilities
		1 Long Term Care Facility

Physical Setting of Programs

As listed in Table 4.2, five of the programs were situated within long term care facilities, three of the adult day support programs were located within seniors centres, and four were situated in acute care hospitals. Only two of the day support programs operated in freestanding locations separate from other geriatric programs/services. The space allocated to individual adult day programs varied greatly. However, data on physical space per client was not available. Programs which are situated within other facilities have the advantage of being able to share resources with the on-site long term or acute care facility. This may be particularly cost advantageous for day hospitals which conduct comprehensive physical assessments and require investigative and laboratory services. The older adults who attend such facilities can receive 'one stop shopping' and do not have to deal with transportation and coordination issues which can be overwhelming and costly.

Description of Communities

Six of the day programs were located in communities with populations over 650,000. Two programs were in centres where the population ranged from 50,000 to 100,000, and two programs were in centres with between 10,000 and 50,000 people. Four programs were located in communities with populations of less than 10,000. The average population of the town or city in which day hospitals were located was 448,699, while in day support programs the average population was 249,089. When asked to describe the communities that the day program serves, program managers in five locations specifically referred to the high proportion of seniors in their communities, with the proportion of those over age 65 ranging from 15% to 25%. Program managers also noted that those figures were expected to increase substantially over the next 10 to 20 years. Large catchment areas were directly referred to by four of the program managers in their community descriptions. Another theme that ran through several of the community descriptions was the ability of the day program to serve an urban/rural mix of clients.

Services Available in the Community

Program managers were asked to identify which of a number of health related services were available in their communities. As Table 4.3 indicates most services were available in all of the communities. Physiotherapy, Home Care, footcare, social services, Meals on Wheels, occupational therapy, mental health services, and physicians were geographically located within the community for all of the 14 day programs. The notable exceptions included the unavailability of nursing services from the Victorian Order of Nurses in any of the rural settings and reduced availability of psychologists and private handyman services, again particularly evident in rural settings.

Table 4.3 Services Available in Day Program Communities by Model of Care, Program Type, and Geographical Location

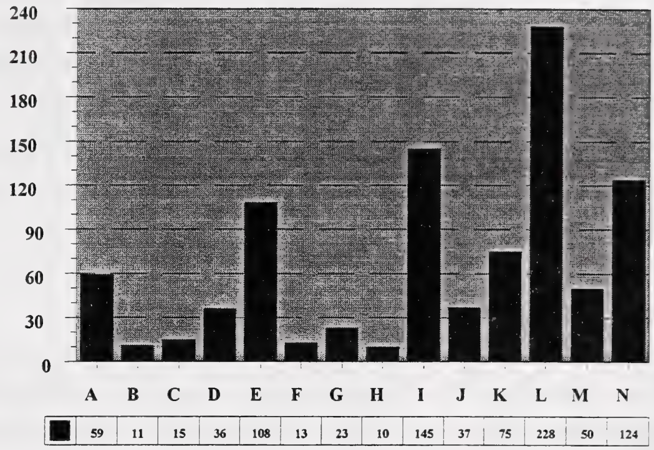
Service	Model of Care		Program Type		Geographical Location		Total
	Day Hospital n = 5	Day Support n = 9	Demonstration Sites n = 8	Comparison Sites n = 6	Rural Sites n = 5	Urban Sites n = 9	n = 14
Home Care Handyman	5	7	7	5	4	8	12
Home Care Homemaker	5	9	8	6	5	9	14
Home Care Nurse	5	9	8	6	5	9	14
Other Home Care Services	5	7	7	5	4	8	12
Handyman	4	7	5	6	3	8	11
Homemaker	4	8	6	6	4	8	12
Lifeline	5	9	7	6	5	8	13
Meals on Wheels	5	9	8	6	5	9	14
Mental Health Services	5	9	8	6	5	9	14
Occupational Therapy	5	9	8	6	5	9	14
Physician	5	9	8	6	5	9	14
Physiotherapy	5	9	8	6	5	9	14
Podiatrist/ Footcare	5	9	8	6	5	9	14
Psychologist	5	7	6	6	3	9	12
Social Services	5	9	8	6	5	9	14
Victorian Order of Nurses	5	4	4	5	0	9	9

Operating Characteristics

Length of Operation

As indicated in Figure 4.1, programs had been in operation from 10 months to 19 years. Five programs had been operating for less than two years. Four had been in operation between two to five years, two from five to ten years, and three for more than 10 years. The average length of time of operation including all day programs in the study was 5.5 years. Day hospital programs had been, on average, operational for 87 months, compared to an average of 55 months for day support programs. The length of operation of demonstration sites averaged 34.4 months, while comparison sites averaged 109.8 months. The length in operation at rural sites averaged 48.6 months, compared to 76.8 months at urban sites.

Figure 4.1. Length of Operation by Program (in months)



Hours of Operation

The number of hours and days of operation per week varied from program to program. Table 4.4 contains a summary of hours of operation for each day of the week in which programs were operating and compares hours of operation with the model of care (day hospital/day support), program type (demonstration/comparison), and the geographical location (rural/urban). None of the programs were open on either Saturdays or Sundays, and only one program offered evening hours on one weekday night every week. Several of the day programs also closed down for a portion of time in the summer for holidays.

Table 4.4 Hours of Operation (Mean) by Model of Care, Program Type, and Geographical Location

	Model of Care		**Program Type**		**Geographical Location**	
Day of Week	Day Hospital	Day Support	Demonstration Sites	Comparison Sites	Rural Sites	Urban Sites
Monday	4.9	6.7	6.6	4.9	7.7	4.9
Tuesday	8.2	7.0	7.2	7.7	7.7	7.7
Wednesday	8.2	7.0	7.2	7.7	7.7	7.3
Thursday	8.2	6.5	7.3	6.9	7.7	6.8
Friday	8.2	6.1	6.2	7.7	7.7	6.4
Total	**37.7**	**33.3**	**34.5**	**34.9**	**38.5**	**33.1**

In that day programs provide direct benefits to clients and indirect benefits to their caregivers, hours of operation are of considerable concern to the population served. The average weekly hours of operation of programs studied at under 35 are relatively low considering that the service offered is a vital one designed to maintain the frail elderly in their homes and delay or avoid the need for entry to a long term care facility. The unavailability of evening and weekend hours, and limitations on the number of hours clients may attend the day centre on both a daily and weekly basis are issues which must be addressed if centres are truly going to serve the needs of people in the future. The closure of programs for holidays also creates an added stress for clients and caregivers who rely on the services provided by day programs.

Staff

The total number of staff in adult day programs ranged from two to 23, with an average of eight per program site (see Table 4.5). The total number of staff is broken down by model of care, program type, and geographical location in Table 4.6. The staff to client ratio also varied by type of program, with an average of 4.2 clients per staff member in day hospital programs and 7.0 clients per staff member in day support programs. One might expect that day hospitals would have lower staff to client ratios given their focus on assessment, treatment, and rehabilitation. Demonstration sites had on average lower staff client ratios than comparison sites. The increased staffing levels of programs during their imple-mentation stage with less than full complements of clients contributed to this disparity. Had programs been running at full capacity, this difference would have been reduced. Rural sites also reported lower staff to client ratios, with an average of 4.8 clients per staff member, compared to 6.7 in urban sites. Again, some of this difference may have been accounted for by the start-up phase of programming. However, if one accounted for the fact that all day hospital sites were located in urban areas with greater services and lower staff/client ratios, the rural/urban disparity would be even greater.

The number of staff full time equivalents (FTEs) ranged from two to 13.6, with an average of 5.7 (see Table 4.5). In Table 4.6, a comparison of staff FTEs by model of care, program type, and geographical location is presented. Similar to the trend noted for total number of staff, day hospitals, urban sites, and comparison sites reported greater number of staff FTEs. The staff to client ratio was also calculated using number of FTEs to number of clients (see Table 4.6). Day hospitals had slightly lower staff to client ratios than did day support programs. Table 4.7 summarizes the number of FTEs for each type of position according to model of care, program type, and geographical location. The type of staff varied considerably from program to program, particularly between day hospital and day support programs. A synopsis of the job descriptions provided for each category of staff are included below.

Table 4.5 Client/Staff Ratios by Program

Program	Average Number of FTEs	Clients to FTEs Ratio	Total Number of Staff	Clients to Staff Ratio
A	4.0	6.8	4.0	6.8
B	2.6	4.2	5.0	2.2
C	3.0	4.0	3.0	4.0
D	2.0	7.0	2.0	7.0
E	2.7	9.6	3.0	8.7
F	3.0	1.7	3.0	1.7
G	3.8	12.6	7.0	8.7
H	9.3	3.9	13.0	2.8
I	5.0	18.0	6.0	15.0
J	3.6	14.7	4.0	13.2
K	7.5	5.1	9.0	4.2
L	8.2	7.3	10.0	6.0
M	11.9	5.0	18.0	3.3
N	13.6	3.5	23.00	2.1

Table 4.6 Client/Staff Ratios by Model of Care, Program Type, and Geographical Location

	Model of Care		Program Type		Geographical Location	
	Day Hospital	Day Support	Demonstration Sites	Comparison Sites	Rural Sites	Urban Sites
Total Number of Staff	14.0	4.0	5.0	12.0	4.0	10.0
Clients to Staff Ratio	4.2	7.0	5.0	7.3	4.8	6.7
Average Number of FTEs	9.1	3.9	3.6	8.6	3.9	6.8
Clients to FTE Ratio	6.5	7.9	6.2	9.0	5.5	8.4

Table 4.7 Staff Full Time Equivalents

Position	Model of Care		Program Type		Geographical Location	
	Day Hospital	Day Support	Demonstration Sites	Comparison Sites	Rural Sites	Urban Sites
Home Support Aides	0.0	0.0	0.0	0.0	0.0	0.0
Licensed Practical Nurses	1.1	0.2	0.4	0.7	0.2	0.7
Manager	0.9	1.0	1.0	1.0	1.0	1.0
Nurses	2.4	0.2	0.3	2.0	0.4	1.4
Nursing Aides	0.3	0.0	0.0	0.2	0.0	0.1
Occupational Therapists	0.8	0.03	0.2	0.5	0.1	0.4
Personal Care Aides	0.0	0.9	0.3	0.8	1.3	0.1
Physicians	0.5	0.0	0.1	0.4	0.0	0.3
Physiotherapists	0.5	0.0	0.1	0.3	0.0	0.3
PT/OT Aides	0.1	0.0	0.1	0.1	0.0	0.1
Recreation Aides	0.4	0.8	0.4	0.9	0.5	0.7
Recreational Therapists	0.3	0.4	0.4	0.3	0.1	0.5
Other	1.8	0.3	0.4	1.5	0.3	1.20
Total FTE's	**9.1**	**3.8**	**3.7**	**8.7**	**3.9**	**6.8**

Program Managers

Every program had one or more persons who oversaw the program and was referred to as either the manager, coordinator, or program director. The main function of this individual was the organization and management of daily programming, staffing, and coordination of the overall operation of the program. Day hospital programs had a mean of 0.9 manager FTEs, while the figure for day support programs was 1.0. Demonstration sites and comparison sites, as well as rural and urban sites all averaged 1.0 manager FTEs. The day program manager in several programs was responsible for sharing client information with family, physicians, and team members about all facets of the program and apprising them of changes in the health of clients. Other functions identified in job descriptions for managers involved the management of financial resources, health assessment, program development, and planning recreational activities. The evaluation of care plan objectives was also reported to be the responsibility of a program manager. The function of this person also involved ensuring efficiency in the operation of the program through monitoring staffing, delegating responsibilities, and supervision of practicum students and volunteers. The manager's responsibilities at some programs also included implementing activities, attending to the needs of the participants, organizing the volunteer program, and providing the participants with mechanisms of support which enable them to remain independent. The coordination of staff and budget and organizing admissions and discharges at several sites were also often the responsibility of the manager.

The educational requirements for the position of program manager ranged from a certificate/diploma in social sciences, to licensed practical nurse (LPN) with at least five years experience in geriatric nursing, to registered nurse with a diploma or degree in nursing and previous nursing experience in geriatrics and/or adult day care. In some programs with LPN coordinators, completion of an oral medication course was required. CPR certification was specified as a requirement in the job description of coordinators at several programs.

Registered Nurses

Registered nurses in adult day programs were generally required to provide health care services to meet the physical, psychosocial, and emotional needs of their clients. Client teaching on a group and individual basis were also functions of nurses at a number of programs. Assistance with activities of daily living and encouragement of clients to participate in activities may further be a responsibility of the position. The nurse's responsibilities may also involve assuming the role of the manager in the absence of that individual. A diploma or degree in nursing with associated experience in geriatric nursing was required by most programs employing registered nurses. The mean number of registered nurse FTEs in day hospital programs was 2.4, whereas in day support programs it was 0.2. The average number of registered nurse FTEs in demonstration sites compared to comparison sites was 0.3 and 2.0 respectively. The number of nurse FTEs in rural sites was 0.4 and in urban sites was 1.4. This difference was not surprising given the fact that all of the day hospitals were located in urban centres and that adult day hospitals, with a more medical orientation employed a greater number of registered nurses. The greater proportion of adult day hospitals in the demonstration group accounts for the difference in registered nurse FTEs between demonstration and comparison sites.

Licensed Practical Nurses

Licensed practical nurses (LPNs) were also utilized in many of the programs and were responsible for monitoring health concerns of the clients, providing physical care, and assisting clients in meeting their activity of daily living needs. The average number of LPN FTEs in day hospital programs was 1.1 which was higher than the average of 0.2 LPN FTEs in day support programs. The mean number of LPN FTEs was 0.4 in demonstration sites and 0.7 in comparison sites. Rural sites averaged 0.2 LPN FTEs, while urban sites averaged 0.7.

Recreational Therapists

Recreational therapists were integral team members at a number of day programs and were typically responsible for the planning, direction, and evaluation of recreation and socialization activities of clients. Responsibilities included supervision of volunteers and co-supervision of participants with other day program staff. A certificate in recreational therapy was required and previous community and geriatric experience was considered an asset. The average number of recreational therapist FTEs at day hospital programs was 0.3 and 0.4 for day support programs. The mean number of recreational therapist FTEs in demonstration sites was 0.4 compared to the mean number in comparison sites which was 0.3. Rural sites employed on average 0.1 recreation therapists, compared to urban sites which averaged 0.5.

Rehabilitation Therapists

Several of the programs had occupational therapists and physiotherapists directly involved with the program. There was an average of 0.8 occupational therapist FTEs in the day hospital programs compared to 0.03 in day support programs. The number of occupational therapist FTEs in demonstration sites was 0.2 and in comparison sites was 0.5, while in rural sites occupational therapist FTEs were 0.1 and in urban sites were 0.4. Day hospitals reported an average of 0.5 physiotherapists, compared to zero in day support programs. Demonstration sites averaged 0.1 physiotherapist FTEs, while comparison sites averaged 0.3 FTEs. Rural sites also reported no physiotherapist FTEs. Their urban counterparts reported an average of 0.3 FTE physiotherapists. A diploma/degree in their related field and preferably experience with the geriatric population was required for each position.

Physicians

The number of physician FTEs in day hospitals was 0.5, while in day support programs no FTEs for physicians were reported. Demonstration sites averaged 0.1 physician FTEs and comparison sites averaged 0.4. Urban sites averaged 0.3 physician FTEs compared to zero at rural sites. The physician specialties reported included a general practitioner at one program; a general practitioner, a geriatrician, and a psychogeriatrician at a second program; a psychiatrist and a geriatrician at a third; and at a fourth a psychogeriatrician, internal medicine specialist, and an ophthalmologist.

Aides

Nursing aides, personal care aides, recreation therapy aides, and physical therapy/occupational (PT/OT) aides were utilized in many of the adult day programs (see Table 4.7). There was considerable overlap in the roles for various members of this group. The major functions of persons in aide positions included providing personal care to clients, and assisting with meals, programs, outings, discussion groups, and recreational activities. Additional responsibilities ranged from planning and running programs to carrying out activities that were assigned by supervisors. Educational requirements ranged from an RN attendant or personal care aide with one year minimum experience in extended care to an LPN with a minimum of one year's experience in extended care. Other requirements in some programs included CPR certification, completion of first aid courses, and/or a Class 4 driver's licence.

Other

Staff represented in the other category in Table 4.7 included social workers, dieticians, pharmacists, and clerical support staff. Day hospitals averaged 1.8 other FTEs and day support programs averaged 0.3. Similarly, comparison sites reported more staff in the above groups at 1.5, than did demonstration sites which averaged 0.4. Undoubtedly this difference was attributable to the fact that there was a higher proportion of day hospitals in the comparison site group, than in the demonstration site group. At urban sites, the average number of other FTEs was 1.2, while in rural sites it was 0.3, again reflecting the fact that all of the day hospitals were located in urban sites.

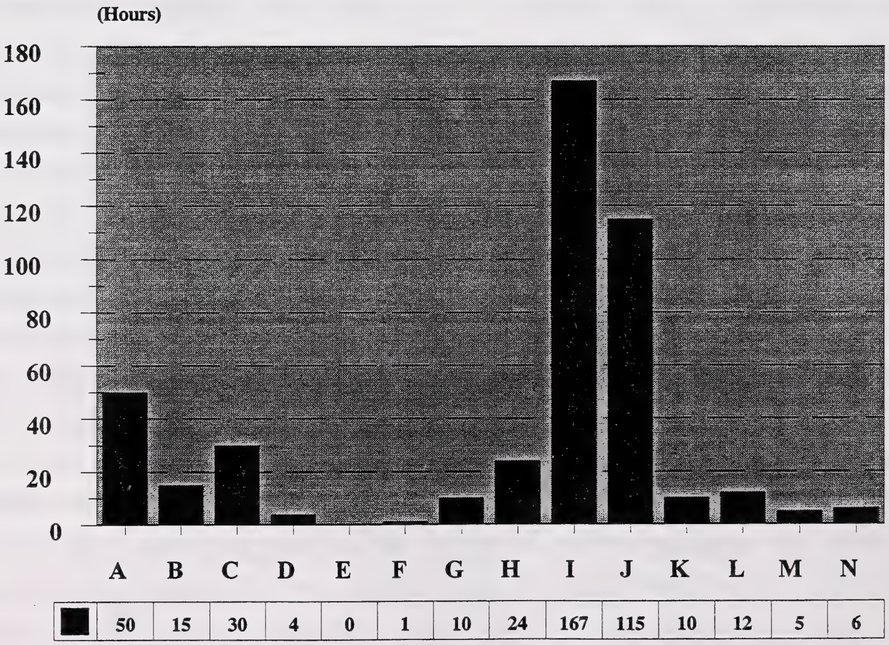
Volunteers

Volunteers were utilized in all but one of the adult day programs. The number of volunteers at each site ranged from one to 25 and averaged just over eight per site. One program reported drawing from a list of 250 volunteers for the entire hospital in which they were located. This number was not included when determining the average number of volunteers. Day support programs, comparison sites, and urban programs all reported a greater number of volunteers than their counterparts (see Table 4.8). The number of volunteer hours per week ranged from 0 to 167, with an average of 32 hours per week. As shown in Figure 4.2, seven programs reported 10 or less volunteer hours per week. Four programs reported between 11 and 30 hours per week of volunteer time, one reported 50 hours per week, and two reported over 100 hours of volunteer time each week. Mean number of volunteer hours are reported in Table 4.8. Again day hospitals, comparison sites, and urban sites reported more volunteer hours per week than did day support programs, demonstration sites, and rural programs. Urban sites have a larger pool of volunteers to draw from than do rural sites. Although there are willing volunteers in rural settings, due to the small pool available, volunteers may be overworked within the community and less available to volunteer at adult day programs.

Table 4.8 Volunteers by Model of Care, Program Type, and Geographical Location

Source	Model of Care		Program Type		Geographical Location	
	Day Hospital	Day Support	Demonstration Sites	Comparison Sites	Rural Sites	Urban Sites
Average Number of Volunteer Hours per week	11.4	43.6	16.8	52.5	6.0	46.6
Average Number of Volunteers	5.0	9.4	4.3	15.0	1.8	11.9

Figure 4.2. Number of Volunteer Hours by Program



The roles of volunteers were similar across programs. The main role of the volunteers reported by program managers was to aid both the staff with the operation of the program and the participants to become involved in it. According to descriptions of the roles of volunteers submitted by the day program managers, volunteers encouraged independence and facilitated participant interaction and growth. They assisted with staff activities, outings, and activities of daily living. The education and training provided for volunteers varied from a volunteer package and on the job training from day support staff, to attending a training workshop and following a volunteer's handbook. Other volunteers came intermittently from hospital auxiliaries, churches, and school groups for special occasions.

The role of volunteers is clearly a key one in adult day programs. The average number of volunteer hours at 32 per week across all programs is just under the number of hours for a full-time staff member in each centre. The amount of effort contributed to day programs by persons who volunteer their time is thus quite substantial and important to the operation of day programs. It is clear that volunteers can help with activities which brighten the outlook for clients, and that many of these activities might otherwise be difficult to offer to clients given tight staffing conditions. The range of activities and amount of personal interaction with clients is clearly enhanced through the services of volunteers.

Coordination with Community Services

Coordination with community services was perceived favourably by all of the program managers, and several indicated that the level of cooperation and communication was excellent. Strong linkages with other adult day programs, Home Care staff, and community groups were specifically referred to by about half of the program managers. Linkages with lodges, physicians, and mental health services were also reported.

Effect of Single Point of Entry

The single point of entry model was developed in Alberta in 1984 in order to streamline entry to long term care services and consists of five processes: referral, assessment, case coordination, reassessment, and services/placement. To access all long term care services, a standardized initial assessment is carried out by a trained assessor from Home Care. The Alberta Assessment and Placement Instrument (AAPI) is the primary assessment tool used in the single point of entry model. Some of the objectives of the single point of entry model are to coordinate assessment and placement functions, to emphasize the use of community-based services whenever possible, and to handle referrals and other matters promptly and effectively (Alberta Health, 1990).

Day program managers were asked to describe the effect of the single point of entry model on their programs. One program manager stated that the single point of entry model was not available at her site. Three other program managers made no comments in response to this question. Three day hospital programs (60%) and six of the nine day support programs (66.7%) identified positive effects of single point of entry. Six demonstration sites (66.7%) and three comparison sites (33.3%) identified positive effects, as did three rural (33.3%) and six urban (66.7%) sites. The positive effects mentioned included an increase in the number of referrals and clients and the usefulness of the information contained in the AAPI, with several programs indicating that they utilized the AAPI as an assessment tool in their own programs. Only one program manager indicated a negative impact on their program as a result of single point of entry. The negative change was identified as a reduction in the number of referrals received from Home Care. From the perspective of most adult day program managers, it would appear that the objectives of the single point of entry model are being met.

Program Marketing

Four day hospital program managers (80%) and four day support program managers (44.4%) reported that their program had been advertised. Of these, six identified multiple methods of advertising including local and regional newspapers, brochures, business cards, radio spots, posters, and personal speaking engagements at a variety of organizations (e.g. Home Care, physician groups, acute care facilities). One program identified the local newspaper as its main source of advertising, and one program indicated that it used a brochure as its only source of advertising. Six demonstration sites reported that they advertised their program (75%), while two comparison sites (33.3%) also reported advertising. Five urban sites (55.6%) and three (60.0%) rural sites advertised their program.

Program Size

Current Number of Clients

The number of clients enrolled at the time the program managers completed the questionnaires ranged from five to 90, with an average of 37.7 (see Figure 4.3). Four programs had fewer than 20 clients, four had 20 to 39 clients, and five had between 40 and 60 clients. The largest program had 90 clients. Day hospital programs averaged 50.4 clients per program compared to day support programs which averaged 30.7 (see Figure 4.4). This difference may reflect the fact that all of the day hospitals in the study were located in urban areas with a larger population available from which to draw clients. Demonstration sites averaged 22.4 clients while comparison sites averaged 58.2 clients, a reflection of the location of all but one of the comparison sites in an urban setting, where the catchment population was clearly higher. The average number of clients in a rural program was 18.8 compared to 48.2 in urban programs, again reflecting the larger catchment population in urban centres (see Figure 4.4).

Figure 4.3. Program Size

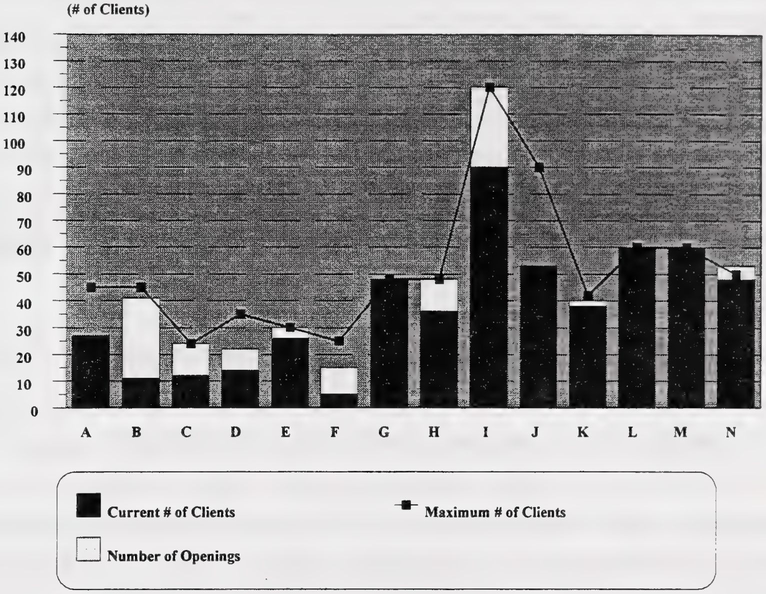
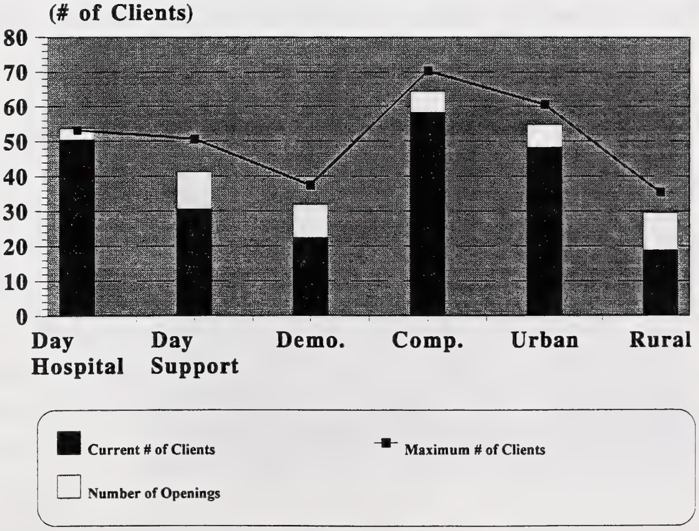


Figure 4.4. Program Size by Model of Care, Program Type, and Geographical Location



The total number of client days in the preceding 12 months ranged from 545 to 4997, and averaged 2701. The mean number of client days spent in day hospital programs was greater than that in day support programs, 3402 days compared to 2312 days respectively. This difference may possibly be again explained by the situation of all day hospital programs in urban areas where the catchment population is larger, by the fact that several demonstration programs in rural areas had a very low client census, and also by the fact that the unique assessment function of day hospital programs may lead to a demand for this service. Three programs reported less than 1000 hours. Demonstration sites averaged 1382 client days, while comparison sites averaged 4460 client days. Rural sites averaged 1867 client days and urban sites averaged 3164. These differences may possibly be explained by the same factors referred to above.

Maximum Number of Clients

The maximum number of clients that could be accommodated in the programs ranged from 24 to 120 (see Figure 4.3). Four programs could accommodate fewer than 40 clients. Six programs had room for between 40 and 50 clients, and four programs could accommodate more than 50 clients. The average maximum number of clients was just over 50 clients (51.6) over all programs. The average maximum number of clients in day hospital programs was slightly higher than the day support programs' average (see Figure 4.4). Comparison sites and urban sites both reported a higher number of maximum clients. As you can see in Figure 4.3, two programs reported no openings for clients, despite being below the maximum number of clients they indicated they could accommodate. In these situations, it is likely that some of their clients were attending more frequently than the average client and thus were taking up spaces that might have been allocated for new clients.

At the time of completing the questionnaire, there were no openings for new clients in five programs and four other programs indicated they could accommodate 10 or fewer new clients (see Figure 4.3). Two programs had room for 12 additional clients each, and two could each accommodate 30 new clients. In Figure 4.4, the mean number of openings for new clients in is contrasted by model of care, program type, and geographical location. Seven of the programs had waiting lists with between three to 30 persons on them, averaging 13.4 persons per program. Day hospitals, urban sites and comparison sites had larger average number of persons on waiting lists (see Table 4.9). The length of time most clients spent on a waiting list ranged from two weeks to 24 weeks, with an average of 8.5 weeks. Day hospital programs were more able to accommodate clients quickly than were day support programs, in large part because of the short stay and greater turnover of clients in day hospital programs (see Table 4.9). Even so, clients on average had to wait more than a month to be admitted in those programs that had waiting lists. This waiting time is of concern, particularly if day programs are to fulfill the objective of facilitating discharge from acute care facilities.

Table 4.9 Waiting Time and Number of Clients on Waiting List by Model of Care, Program Type, and Geographical Location

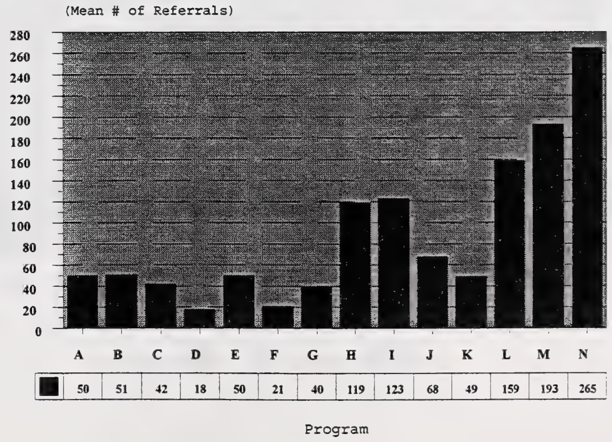
Source	Model of Care		Program Type		Geographical Location	
	Day Hospital	Day Support	Demonstration Sites	Comparison Sites	Rural Sites	Urban Sites
Average Number of Clients on Waiting List	10.4	4.7	1.3	14.0	1.0	9.9
Average Time Spent on Waiting List (in weeks)	5.8	14.0	10.0	8.2	4.0	9.4

Client Referrals, Admissions, and Discharges

Referrals

The fourteen adult day programs in the study received over 1000 referrals to their programs during the preceding year, with an average of 89 referrals per program (see Figure 4.5). The largest number of referrals (43.8%) came from community programs, especially Home Care. Physicians accounted for a further 24.7% of referrals, acute care centres for 18.0%, and family members for 10.1%. A small number (2.2%) were referred to the program from long term care facilities, and 1.1% were reported to be self-referrals.

Figure 4.5. Number of Referrals



Day hospitals on average each received 155.2 referrals in the previous year, while day support programs averaged 52.4 referrals over the same time period. In Figure 4.6, a comparison of referral sources by model of care is presented. The number referred to day hospital programs was higher than to day support programs. This is not surprising given the medical assessment thrust in day hospital programs and to the physician's role of diagnosis and treatment. The average number of self-referrals was quite small overall for both day hospital and day support programs. In Figure 4.7, the contrast between referral sources for comparison and demonstration sites is shown. An average of 23.6 clients were referred from the community to demonstration sites and 59.7 clients to comparison sites, a difference that may possibly be explained by the fact that the comparison sites were largely established and had well-developed sources of referral. For demonstration sites this was only partially true. The number of physician referrals to demonstration sites was lower than to comparison sites, again a difference that reflects the larger component of day hospitals in comparison sites. As would be expected due to a larger pool of clients, urban programs averaged more referrals than rural programs. In Figure 4.8 variations in urban/rural referral sources are identified. Again, these figures reflect the nature and size of programs in these areas.

Figure 4.6. Average Number of Referrals by Model of Care

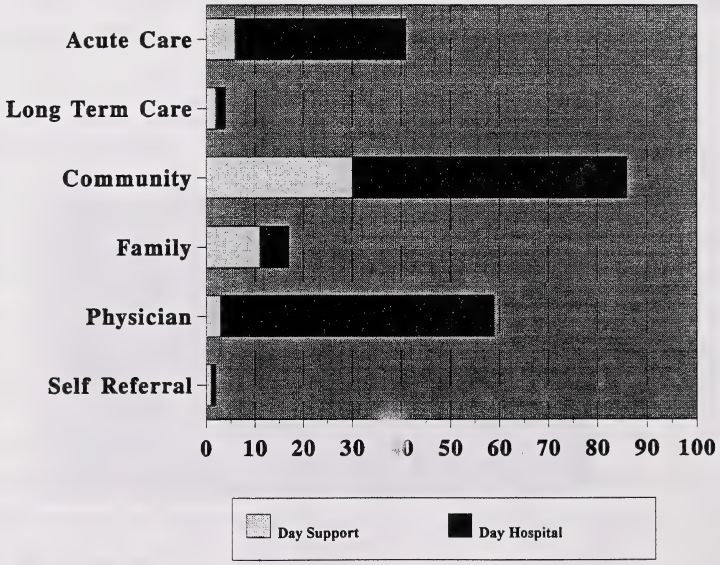


Figure 4.7. Average Number of Referrals by Program Type

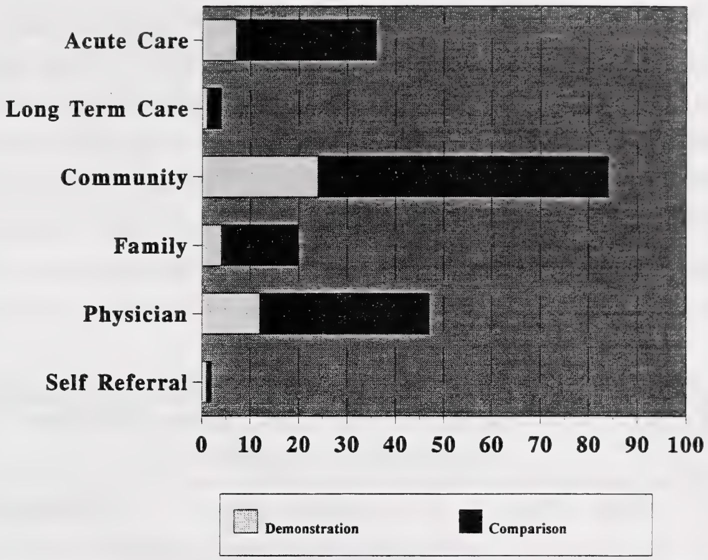
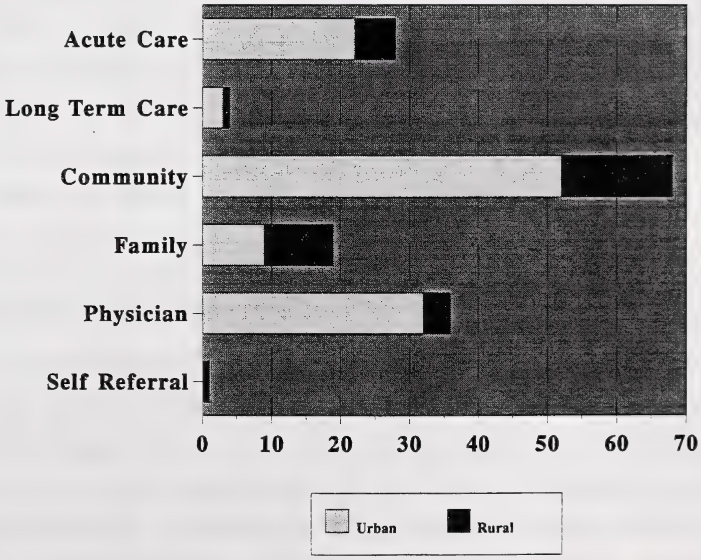


Figure 4.8. Average Number of Referrals by Geographical Location



Non-Admissions

On average, 32 individuals per program were referred but not admitted to the day program in the previous year. Four sites had fewer than 10 individuals referred but not admitted. Three programs had between 10 and 20 individuals referred but not admitted, three received between 30 and 40 referrals who were not admitted, and three had between 60 and 98 individuals referred who were not admitted. Day hospitals reported more client referrals per program that were not admitted than day support programs (see Table 4.10). This difference is likely explained by the more stringent program admission standards for day hospitals and whether or not the individual client could benefit from short-term medical evaluation, treatment, and rehabilitation. Differences by program type and geographical location reflected the differing size of the pool of potential clients in rural and urban areas.

Table 4.10 Client Admissions by Model of Care, Program Type, and Geographical Location

Source	Model of Care		Program Type		Geographical Location	
	Day Hospital	Day Support	Demonstration Sites	Comparison Sites	Rural Sites	Urban Sites
Acute Care (mean)	21.8	3.3	7.0	13.8	5.4	12.4
Community (mean)	69.6	19.2	23.1	56.0	16.4	48.8
Longterm Care Facilities (mean)	3.4	0.3	2.5	0.0	0.6	1.9
Other Day Programs (mean)	3.0	7.7	0.0	14.0	0.0	9.3
Total Number of Admissions (mean)	**97.8**	**30.5**	**32.6**	**83.8**	**22.4**	**72.4**
Non-admissions (mean)	54.2	20.8	13.5	58.3	17.0	41.4

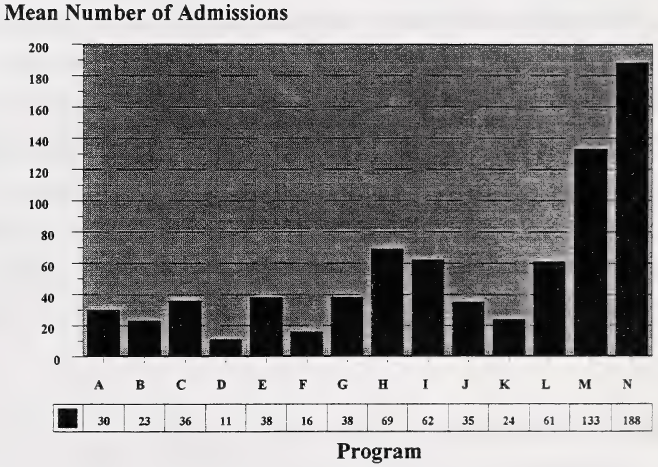
Day program managers were asked to indicate the reasons for non-admission of client referrals. The most frequent reason, reported by 12 of the 14 day program managers, was client refusal. Nine day program managers identified inappropriate referrals as another reason for non-admission. Institutionalization of clients was reported by six managers, death of clients by five managers, and family refusals by four managers as other reasons for nonadmission. Reasons reported by one to three managers included: clients who moved, clients whose condition deteriorated, clients who were hospitalized, or clients who were referred to another day program.

Four of the day hospital program managers (80%) reported that their clients were appropriate for the type of program they offered. In the day support programs, eight of the managers (88.9%) reported that their program had also attracted suitable clients. Six demonstration sites (75%) reported that their program attracted appropriate clients; all six comparison sites stated that they attracted appropriate clients. Four out of five rural programs (80.0%) and eight of nine urban programs (88.9%) reported attracting appropriate clients to their programs. Two programs replied yes and no to this question, that is to say they believed some of the referrals they received were appropriate and some were not.

Client Admissions

On average 54.6 clients were admitted per program during the preceding 12 month period (see Figure 4.9). Four programs admitted 25 or fewer clients, five admitted between 30 and 40 clients, three admitted between 60 and 70 clients, one admitted 133 clients and one admitted 188 clients. Of those admitted, 68.3% came from the community, 18.2% from acute care, 11.0% from other day programs, and 2.6% from long term care facilities. In Table 4.10 a breakdown of client admissions by model of care, geographical location, and program type is provided. Day hospital programs had more admissions than day support programs, reflecting the greater movement in and out of the day hospitals in view of its short term assessment, treatment, and rehabilitation mandate. Admissions from acute care to day hospital programs were considerably higher than admissions from acute care to day support programs. However, this again can be explained by the fact that staff in acute care institutions were well positioned to identify client needs for medical assessment, treatment, and rehabilitation which can be best met in the day hospital. The average number of admissions from other day programs was lower in day hospital programs than day support programs, again reflecting the shorter stay and differing goals for clients. In this way, day support programs are providing follow-up services for clients who are discharged from active treatment programs in day hospital programs.

Figure 4.9. Number of Admissions by Program



Admission Criteria

Admission criteria varied significantly from program to program. The most common criterion for admission was referred to as "need" from either the perspective of the client or caregiver. Generally, most programs accepted older adults who were at-risk for further health deterioration, those who were socially or physically isolated, or older adults with caregivers in need of respite into their programs. Need was defined by two day hospitals as the client requiring a minimum of two or three of the rehabilitative services offered in the program. In some programs targeted toward a specific population such as those with Alzheimer's disease, clients had to meet a number of specific admission criteria. In most programs, clients were not accepted if they had a communicable disease, were abusive or violent, if they had unmanageable incontinence, or if they were unable to be transported by the means available to the program. Several programs had age restrictions, although if need was demonstrated exceptions were made. Several programs required clients to sign a contract indicating their willingness to participate in the program. Two programs required physician referral.

Client Discharges

On average, 49.5 clients were discharged from each program during the preceding 12 months. Five programs reported fewer than 20 discharges in the preceding year, five reported between 20 and 50 discharges, and four had more than 60 discharges. Day hospitals had more discharges in the preceding year than day support programs, again reflecting the greater movement of clients in and out of day hospital programs in view of their unique objectives. Comparison sites also averaged more discharges in the preceding year than demonstration sites, a difference that probably reflected the greater number of day hospitals in the comparison site group. In Table 4.11, discharges are contrasted by model of care, program type, and geographical location.

Number of Clients Discharged to Other Settings

On average, approximately six clients per program were discharged and admitted to long term care facilities during the preceding year. This number ranged from none, in two of the programs, to 16 in one program. In day hospitals, fewer clients were admitted to long term care facilities than in day support programs (see Table 4.11). The differences noted between comparison and demonstration sites are in part due to the larger number of day hospitals in the comparison group. The number of clients who were admitted to acute care settings ranged from zero to 35, with an average of 10 per program. In Table 4.11, acute care admissions are compared by model of care, program type, and geographical location. Client deaths were relatively low at all sites, averaging less than three per program in the preceding year and were similar by model of care, program type, and geographical location (see Table 4.11).

Table 4.11 Client Discharges by Model of Care, Program Type, and Geographical Location

Source	Model of Care		Program Type		Geographical Location	
	Day Hospital	Day Support	Demonstration Sites	Comparison Sites	Rural Sites	Urban Sites
Average Number Admitted to Acute Care	13.8	8.2	4.0	18.5	4.6	13.3
Average Number Admitted to Longterm Care	4.2	7.4	6.0	6.7	7.4	5.7
Average Number of Deaths	2.2	2.4	2.1	2.7	2.6	2.2
Average Number of Discharges	**89.8**	**27.1**	**21.6**	**86.7**	**19.2**	**66.3**

Discharge Criteria

Generally in most programs clients were discharged when they no longer met the admission criteria for that particular program. Admission to a long term care facility, prolonged hospitalization, death, unwillingness of the client to continue in the program, uncontrolled aggression, attending the day program under the influence of alcohol on more than one occasion, or marked deterioration in health status to the point of requiring one on one care were other discharge criteria reported by program managers.

Average Length of Stay

The average estimated length of stay for clients in a day program was 35.2 weeks, and ranged considerably from 9 weeks to 72 weeks. The average length of stay in day support programs was recorded as 55.2 weeks, while that for day hospital clients was 22.8 weeks, again reflecting the unique mandate of the day hospital. The average length of stay for clients in demonstration sites was 32.4 weeks, while those in comparison sites averaged a longer stay of 54.8 weeks. These results are skewed by one comparison site program which had a large number of clients who remained in the program for extended periods of time. Clients' average length of stay was estimated at 35.8 weeks in rural sites and 44.8 weeks in urban sites.

Services Provided

The services provided by adult day programs have been summarized in Figure 4.10. Socialization services for clients were available at all of the day programs. Pharmacists, pastoral care workers, and psychologists were available in fewer than half of the adult day programs. In Table 4.12, the types of services available at day programs are contrasted by model of care, program type, and geographical location, respectively. The services of physical therapists, occupational therapists, nutritionists, pharmacists, nurses, podiatrists, psychologists, pastoral service workers, case coordination, and physicians were available at a larger percentage of day hospital than day support programs. Recreational therapy services and other services were more likely to be provided at day support programs. Caregiver support groups and personal care were available at a similar proportion of day hospital and day support programs. Psychologists were less available in rural programs, but other services were available in approximately equal proportions in rural and urban centres. There were no large discrepancies between services provided at demonstration and comparison sites.

Figure 4.10. Services Provided by Adult Day Programs

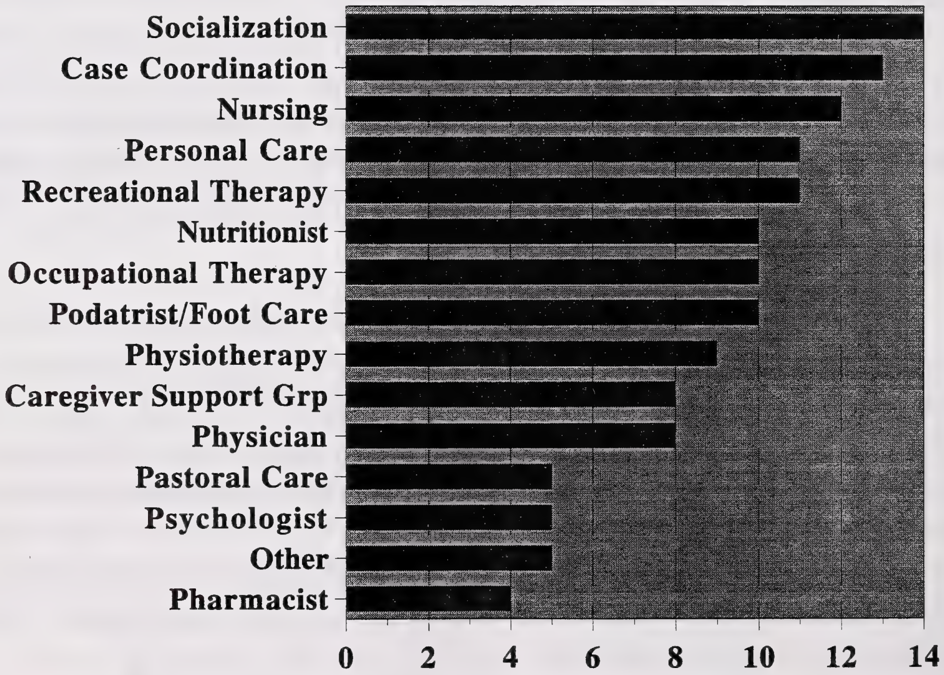


Table 4.12 Services Available at the Programs by Model of Care, Program Type, Geographical Location, and Physical Setting

	Model of Care		Program Type		Geographical Location		Physical Setting			Total
	Day Hospital n = 5	Day Support n = 9	Demonstration Sites n = 8	Comparison Sites n = 6	Rural Sites n = 5	Urban Sites n = 9	Freestanding n=5	Long Term Care Facilities n=5	Acute Care Facilities n=4	n = 14
Caregiver Support Group	3	5	4	4	3	5	3	3	2	8
Case Coordination	5	8	7	6	5	8	4	5	4	13
Nursing	5	7	7	5	5	7	3	5	4	12
Nutritionist	4	6	5	5	5	5	2	5	3	10
Occupational Therapy	5	5	5	5	4	6	2	4	4	10
Pastoral Care	3	2	2	3	2	3	0	2	3	5
Personal Care	4	7	7	4	6	5	3	5	3	11
Pharmacist	3	1	2	2	1	3	0	1	3	4
Physician	5	3	4	4	3	5	0	4	4	8
Physiotherapy	4	5	4	5	4	5	2	4	3	9
Podiatrist or Foot Care	4	6	5	5	4	6	3	4	3	10
Psychologist	4	1	2	3	1	4	0	1	4	5
Recreational Therapy	3	8	7	4	5	6	4	4	3	11
Socialization Service	5	9	8	6	5	9	5	5	4	14
Other	1	4	4	1	1	4	2	0	3	5

Case Coordination

Eight of the day support programs (88.9%) reported using a case coordination system for managing clients. In seven instances, the case coordinator was the adult day program manager. In one instance registered nurses and licensed practical nurses employed by the day program assumed this role. A case coordination system was reported as being utilized by all five day hospitals. Three of these programs reported that several different team members carried a case load. In two of these programs the registered nurses acted as the case coordinators. Seven demonstration sites (87.5%) and all six comparison sites had case coordination available. One demonstration site and two comparison sites had a nurse assuming the role as case coordinator. A manager assumed the role in four demonstration sites and in three comparison sites. Two demonstration sites and one comparison site had more than one health care worker taking on this responsibility. All rural sites and eight of the nine urban sites (88.9%) reported utilizing a case coordinator. In rural sites, the case coordinator was the manager of the program in four instances and a nurse was the program manager in one case. In urban sites, the case coordinator was the manager in three programs, nurses in two cases, and in three sites multiple disciplines were assigned caseloads.

Unique Features of Program

When program managers were asked to discuss the unique features of their programs, certain patterns of program operation were identified. Several program managers characterized their program as having an interdisciplinary or multidisciplinary approach to client care. Another characteristic mentioned by several program managers was a holistic approach to clients which took account of their relationships to family and community systems. A number of programs identified some of the specific programs available to psychogeriatric clients as a unique feature of their program. These included small group therapy programs, daily contact with a psychogeriatrician, individual counselling, and specialized psychogeriatric care. Integration with other centres was also identified as a unique feature. Program managers identified affiliations with acute and geriatric assessment treatment centres, long term care facilities, and senior centres as unique features. These affiliations were viewed positively. One program manager indicated that their program was 100% community based, and was not affiliated with any health care facility.

Two program managers indicated that they also offered specialized programs and activities for young adults. Several program managers indicated that the full range of services available at their programs was a unique feature. The services referred to included laboratory and diagnostic services, rehabilitation services, home visits, whirlpool baths, health promotion and illness prevention interventions, and the variety of activities such as gardening, woodworking, baking, and day trips that were available to clients. The home-like atmosphere of the adult day program setting was also considered a unique feature by several managers. At one program, families were invited to attend birthday parties held at the day program for clients. Several program managers referred to the type of population served by their programs. One program manager noted the diversity of the population served by the program, while another indicated that the particular program was intended for a select dementia population. Multiple sites serving a large number of participants were noted as a unique feature in one instance.

Perceived Need for Program

All program managers believed that their program was filling a gap in services in their community. Several common themes came to light when program managers were asked to make an assessment of the need for adult day programs. The aging population and high percentage of seniors were identified as important reasons for having adult day programs. Day programs were perceived as delaying institutionalization, providing support and respite for caregivers, facilitating earlier hospital discharges, decreasing inpatient days and physician visits, providing health assessment and health monitoring services, providing coordinated long term care to people living in the community, and providing social interaction and support for lonely, isolated, dependent adults. Program managers interpreted high levels of client and family satisfaction at the time of discharge as an indication that programs were meeting a need(s) for their clients and families. According to program managers, the programs were generally well received in the communities they served. The high number of referrals and long waiting lists for some programs were other indicators of the need for the services provided by adult day programs. Program managers reported that the needs of clients and families were continually becoming more complex and that to maintain clients in their homes the services provided by adult day programs were essential for the well-being of both clients and their caregivers. Long waiting lists for admission to long term care facilities meant that clients with poorer health status were remaining in their homes for extended periods of time with families providing care. Without the support of adult day programs, these caregivers and clients were noted as being at-risk for further deterioration in health status and a poorer quality of life.

Perceived Strengths of Program

Program managers identified a number of strengths of their programs. Perhaps the most striking was that day programs allowed clients to maintain their sense of independence and quality of life through supported community living. As well, program managers recognized the development of caring relationships with clients as significant and intimated that both staff and clients found these relationships rewarding. Program managers also identified a multidisciplinary approach, a wide variety of services provided, and low staff-client ratios as significant strengths. Group therapy programs were one specific intervention believed to be of significant benefit for clients and were referred to by several program managers. A number of program managers identified a holistic approach as a strength. This was evidenced through the involvement of families in day program activities, provision of respite for families, and the importance of maintaining a pleasant and home-like environment within the day programs. Other strengths reported by program managers included the support and integration of services with associated agencies and facilities. Program managers reported sharing of resources and expertise between facilities and agencies as advantageous. Several program managers identified their ability to intervene quickly in crisis situations to be an important component of their program. In addition, provision of transportation by programs and the low cost of the program for clients were perceived as positive attributes.

Perceived Weaknesses of Program

There were several types of weaknesses perceived by program managers. One referred to by a number of program managers was that their hours of operation were limited in most cases to daytime hours on weekdays and that there were either no or limited services available for evenings or weekends. As well, program managers reported that most of their programming was group oriented as they did not have the time or staff to develop individual programs for clients. Some programs identified that they did not have the full range of services and disciplines available from which their clients could have benefited. A related issue was that due to staffing and limited space, clients in the later stages of dementia, those with serious behavioral problems, or those demanding more intensive physical care had to be excluded from the program. Several program managers commented that the space allocated to the program was small and not well-designed to meet the purposes of the program.

Funding issues were also problematic for a number of programs. The cost to clients presented several difficulties. Some clients did not have the means to pay the daily charge for the program. Others with the means were not willing to pay. The uncertainty of funding from year to year making long range planning difficult was identified as a weakness by one program manager. High attrition rates due to the fragile nature of the population being served also posed program planning challenges. Another issue related to funding was problems with transportation, especially in rural areas where costs, transportation time, and distances were higher than in urban areas.

A third area which received attention from program managers dealt with communication problems of several types. Communication with the community at large in order to establish the credibility and raise awareness of a new program posed a difficult problem for at least one program. In some situations, negative stereotypes associated with attending an adult day program, particularly if it was psychiatric in nature, had to be overcome. In another program there were numerous physicians involved in the program each looking after their own clients which made delivering a coordinated program to the clients difficult. Another program reported that as they had no physician attached to the program, it was also difficult to coordinate and initiate treatment/medication changes as each client's family doctor had to be consulted and oriented to the adult day program's purpose and functions. Finally, some programs found that because their referral systems were somewhat cumbersome, at times communication breakdowns occurred between the program and the referring agencies.

Common Problems/Issues

There was considerable overlap between the perceived weaknesses of the program reported by managers and the common problems and issues they noted. Those already referred to include the lack of time for staff to plan individualized programs, for inservice education for staff, and for staff meetings; the difficulty in obtaining affordable and timely transportation; funding issues; and costs to clients. Lack of awareness by the community of the program, high attrition rates, limited hours of service, and limited rehabilitation resources and staff were also noted as common concerns.

The type of clients served by day programs posed a number of challenges for staff. Many of the clients were dealing with multiple losses associated with aging, with decreased functional status, and some were members of dysfunctional family systems. The difficult behavior of some clients was also problematic, and as with any group of individuals occasional serious personality clashes occurred and required creative intervention by staff.

Several programs were dealing with long waiting lists and were not able to respond quickly to the needs of clients. Other programs were not receiving sufficient numbers of referrals to make the programs viable. Several common problems encountered concerned program administration. These included charting issues, such as maintaining consistency from one discipline to another, and development of appropriate forms for monitoring the progress of clients in the program. Another common problem reported was difficulty in promoting the team concept amongst staff. One program manager reported that duplication of tests being done within the program and again in the community posed some problems. Finally, one program manager reported difficulty in discharge planning due to the limited number of community services and resources available for seniors in the community served by the program.

Effects of Program

Program managers were asked to describe the impact of the adult day program on clients, caregivers, home care utilization, acute and long term care facility utilization, and utilization of other long term care or health services.

Clients

Benefits to clients could be classified into several categories including improved mental state, physical health, and quality of life. Program managers identified that attending an adult day program resulted in a reduction of anxiety in clients, increased self-esteem, instilled a sense of purpose and belonging, decreased depression, improved coping skills, and contributed to helping some clients become more alert and outgoing. Improved relationships with family members were also reported. An improved health status was reported to have been achieved by many through exposure to health information and through assessment and treatment of health problems by skilled practitioners. With this improved health status clients were able to increase their independence in activities of daily living and were more likely to be able to continue living independently in the community.

Caregivers

Most program managers felt that by having their family member attending an adult day program, caregivers received a respite benefit as evidenced by a reduction in stress and anxiety and feelings of burden reported by caregivers. Program managers believed that caregivers received support from staff in terms of education and having someone with whom to discuss their concerns. This support helped caregivers to improve their coping skills and family relationships and ultimately improved the quality of life of caregivers.

Home Care Utilization

The effect of programs on home care utilization was more difficult for program managers to describe. Most believed that the services provided through adult day programs supplemented or complemented those provided through Home Care. Wherever possible duplication of services was avoided through strong communication linkages with Home Care. However a few program managers alluded to some remaining duplication of services. In order to continue to live in the community, many clients required Home Care services in addition to the services provided by adult day programs. Whether this was, in fact, duplication of service would be open to question as some frail clients might well require the services of Home Care and still be able to benefit from a day program.

Acute and Long Term Care Facility Utilization

Program managers generally perceived that their programs facilitated the transition from acute care to home resulting in earlier discharges from hospital for some of their clients. In some programs, clients in lodges were able to be maintained in the lodges because of their attendance at an adult day program. Without the adult day program, these clients would have been transferred to long term care facilities. For those living in their own homes, participation in an adult day program was believed to decrease the number of visits to emergency rooms, decrease the inpatient acute care length of stay, and decrease the number of admissions to acute and long term care facilities thus allowing participants to remain living independently in the community for a longer period of time.

Other Health Services

Several program managers identified areas in which other health services have been impacted by adult day programs. These included a reduction in community mental health services. Assessments of clients are shared with other agencies and physicians and are used by the Public Guardian's office in determining competency and guardianship decisions. One program manager indicated that other health services utilized the day program as a source of information, resources, and education for their staff.

PROGRAM COSTS

Expenditures

In Table 4.13, the cost of rent, staff salaries, equipment, supplies, and miscellaneous items by program for the previous fiscal year are outlined. In Table 4.14, the average cost for each category according to model of care, geographical location, and program type is presented. Costs have been rounded to the nearest dollar. Prorated means were calculated by dividing the total costs in a category (e.g. rent) by the number of programs that reported costs in this category.

Rent

Only three adult day programs were currently paying rent for the premises that they occupied. However, one program was paying more than $30,000 per year for rent. This variance contributes to the disparity in total program costs. The mean rental cost for day hospitals was zero, whereas for day support programs the cost was $5,351. In demonstration sites, the average rental cost was $5,094 compared to $1,233 in comparison sites. Rural programs averaged $2,125 in yearly rent compared to urban programs at $4,170.

Salaries and Benefits

In all day programs, the major expense was in the category of salaries and benefits. Day hospitals with greater numbers of professional staff had considerably higher staff and benefit expenditures compared to day support programs. The average cost of staff salaries for day hospital programs was $444,533, which was significantly higher than the average cost for day support programs at $113,156. The regular use of volunteers supplemented staffing in a number of programs and was an effective cost saving measure. Comparison sites reported higher average salary costs, totalling $352,696, than demonstration sites which averaged $140,611. The average cost of salaries and benefits reported for urban sites was $293,296, while in rural sites this figure was $120,280.

Table 4.13 Program Expenditures by Individual Programs

Program	Equipment	Rent	Salary	Supplies	Other	Total Cost of Program
A	7,073	30,132	99,238	6,476	31,557	**174,476**
B	22,203	10,625	67,177	28,349		**128,354**
C	8,166		61,141	1,811	31,085	**102,203**
D			115,942	5,930		**121,872**
E			90,018	1,174	9,205	**100,397**
F	22,450		93,896	3,141		**119,487**
G			165,460	25,816	16,569	**207,845**
H	4,208		432,016	21,610	10,762	**468,596**
I		7,400	144,000	30,000	28,000	**209,400**
J	2,000		112,619	2,000	30,931	**147,550**
K			234,369		1,723	**236,092**
L	38,750*		365,695	--------------	30,105	**494,550**
M			583,668	3,328	10,000	**596,996**
N	39,628*		675,827	--------------		**715,455**
Total	**144,478**	**48,157**	**3,241,066**	**129,635**	**259,937**	**3,823,273**
Mean	**10,320**	**3,440**	**231,505**	**9,260**	**18,567**	**273,092**
Prorated Mean**	**18,060**	**16,052**	**231,505**	**11,785**	**25,994**	**303,396**

* Costs reported include equipment and supplies combined.

** Prorated means are based on the totals in each category divided by the number of programs which reported expenditures in that category.

No costs were reported for those cells which are blank.

Table 4.14 Program Expenditures by Model of Care, Program Type & Geographical Location							
Variable	**Mean**	**Model of Care**		**Program Type**		**Geographical Location**	
		Day Hospital	Day Support	Demonstration Sites	Comparison Sites	Rural Sites	Urban Sites
Equipment	10,320	16,517	6,877	8,013	13,396	8,931	11,092
Rental	3,440	0	5,351	5,094	1,233	2,125	4,170
Salary	231,505	444,533	113,156	140,611	352,696	120,280	293,296
Supplies	9,260	10,151	8,765	11,788	5,888	7,718	10,116
Other	18,567	25,487	14,722	12,397	26,793	2,186	27,668
Total	**273,092**	**496,688**	**148,871**	**177,903**	**400,006**	**141,240**	**346,342**

Equipment

As several of the programs were relatively new some of the equipment costs included start-up costs and are therefore somewhat non-representative of normal capital cost expenditures. Almost half of the day programs reported no equipment costs in the preceding year. For day hospital programs, the mean total cost of equipment was $16,517, whereas for day support programs it was $6,877. Equipment costs at urban sites averaged $11,092, compared to $8,931 at rural sites. Demonstration sites reported lower average equipment costs for the previous year at $8,013, compared to $13,396 at comparison sites.

Supplies

Supplies included such items as materials for crafts, incontinence products, and linens. The average amount spent on supplies across programs was just under 10,000 dollars. In day hospital programs, the average cost of supplies for a year was $10,151, compared to day support programs which reported $8765. At urban sites, costs of supplies averaged $10,116, compared to $7,718 at rural sites. The cost of supplies for demonstration programs averaged $11,788, compared to $5,888 for comparison sites.

Other Costs

Other costs included items such as start-up costs, furniture, and renovations, special projects, staff training and development, vehicle repair and maintenance, administration allocation, meal and transportation costs, and volunteer expenses. The mean of the total of other costs was $25,487 for day hospital programs and $14,722 for day support programs. In urban programs other costs averaged

$27,668, while in rural programs these averaged $2,186. Comparison sites had higher other costs, averaging $26,793, than did demonstration sites which averaged $12,397.

Total Cost

In Table 4.15, the total overall cost of adult day programs over a one year period of time, the number of client days in one year, and a calculation of the cost per client day for individual programs are identified. The cost per client day was calculated by dividing the total cost by the total number of client days reported. Cost per client day ranged from $39 to $381, with an average of $132.

In Table 4.16, a breakdown of cost per client day by model of care, program type, and geographical location is presented. The cost per client day in day hospitals averaged $178, while this figure was $107 for day support programs. Demonstration sites also had higher average costs per client day, averaging $163 compared to comparison sites which averaged $92. The average cost per client day for urban sites was $128 and for rural sites this figure was $140. The average cost per client day at freestanding programs was $98 per day, compared to $115 in programs located in long term care facilities, and $197 in programs housed in acute care settings.

Table 4.15 Total Cost by Program (Means)

Program	Total Cost of Program	Number of Client Days	Cost per Client Day	Cost per Week**
A	174,476	2,030	86	155
B	128,354	566	227	409
C	102,203	1,080	*95	171
D	121,872	731	*167	301
E	100,397	2,500	*40	72
F	119,487	545	*219	394
G	207,845	2,376	*87	157
H	468,596	1,230	*381	686
I	209,400	4,607	*45	81
J	147,550	3,751	*39	70
K	236,092	4,997	*47	85
L	494,550	4,880	*101	182
M	596,996	4,886	*122	220
N	715,455	3,939	197	355
Mean	273,092	2,701	132	234

* Expenditures for this program are reported on the basis of incomplete data in one of the following categories: equipment, rental of space, salaries, or supplies.

** Cost per week is calculated by multiplying cost per client day by 1.8, the average number of client days per week.

Table 4.16 Cost Per Client Day in Dollars (Means)

	Model of Care		Program Type		Geographical Location	
	Day Hospital	Day Support	Demonstration Sites	Comparison Sites	Rural Sites	Urban Sites
Total Cost of Program	496,688	148,871	177,903	400,006	141,240	346,342
Number of Client Days	3,402	2,312	1,382	4,460	3,164	1,868
Average Cost per Client Day	178	107	163	92	140	128

Revenue

A complete breakdown of the sources of revenue was not reported for two of the programs. The average revenues reported below are based on the information provided by the other 12 programs. In Table 4.17, sources of revenue by model of care, program type, and geographical location are summarized.

Table 4.17 Sources of Revenue in Dollars (Means)

Variable	**Model of Care**		**Program Type**		**Geographical Location**	
	Day Hospital	Day Support	Demonstration Sites	Comparison Sites	Rural Sites	Urban Sites
Associated Institutions	49,969	0	41,641	0	0	27,761
Bequests	0	0	0	0	0	0
Clients	8,765	14,526	5,739	18,513	5,532	14,324
Government	441,542	122,042	137,535	372,800	149,503	290,389
Organization Donations	50	457	542	33	0	383
Other	240	19,797	4,076	19,220	146	15,482
Private Donations	200	2,268	1,729	1,083	0	1,875
Total	**500,766**	**159,090**	**191,262**	**411,649**	**155,181**	**350,214**

Client Revenue

All of the adult day hospitals and seven of the nine adult day support programs (77.8%) reported charging a program fee for clients. The charge per day ranged from $2.20 to $12.50, with an average fee of $7.30, and was the same in both day hospital and day support programs. In Table 4.18, a breakdown of client fees per day by program is provided. This table identifies whether or not transportation and food costs were covered by the program fee. The program charge covered the costs of meals in three day hospital and six day support programs and it covered the costs of transportation in four day hospital and two day support programs. Seven of the demonstration sites (87.5%) and five of the comparison sites (83.3%) reported a program charge for their clients. Meals were included in this cost for five demonstration sites and four comparison sites. Transportation costs were covered by four demonstration sites and two comparison sites. There was a charge to clients at 80.0% of the rural sites and 88.8% of the urban sites. Transportation costs were covered by the program fee at one rural site and five urban sites. Meal costs were covered at three rural sites and six urban sites.

Table 4.18 Daily Client Fees by Program

Program	Program Fee	Covers Cost of Meals	Covers Cost of Transport
A	None	N/A	N/A
B	$5.00	Yes	No
C	$10.00	Yes	Yes
D	$10.00	Yes	Yes
E	$8.00	No	No
F	$12.50	Yes	No
G	$2.20	No	Yes
H	$10.00	Yes	Yes
I	$8.00	Yes	No
J	$9.00	Yes	No
K	None	N/A	N/A
L	$7.50	No	No
M	$10.00	Yes	Yes
N	$10.00	Yes	Yes

Government Revenue

For most adult day programs in this study, the government provided a substantial portion if not all of the funding for the operation of the program. The average amount of government financial support per program was over $200,000, with day hospital programs averaging $441,542, and day support programs averaging $122,042 (See Table 4.17). This support accounted for 88.2% of revenue in day hospital programs and 76.7% in day support programs.

Other Sources of Revenue

Private donations were a source of income for at least five of the adult day programs in this study, while four programs reported receiving funding from various community organizations. None of the programs reported income from bequests. One program reported that they received $249,847 from the institution with which they were associated. Figures for operating costs absorbed by institutions (housekeeping, laundry, utilities, etc.) for those day programs which operated out of institutions were not available. Other sources of revenue included the sale of crafts and baking made by participants, bingos, a commissioning grant from Alberta Health, and the proceeds of raffle ticket draws.

Some Issues Relative to Expenditures

Additional Funds

When program managers were asked what they would use additional funds for if these were available, their overwhelming response was for program expansion. The methods suggested for doing this were quite varied including expanding the days and hours of service, physically expanding the space occupied by the program through renovations or moving to a different location, hiring more staff from a variety of disciplines, advertising and recruiting more participants, augmenting current social and recreational programs and developing additional programs such as an outreach program, a young adult day program, and merging seniors and children's day programs. Several program managers identified equipment which they would like to purchase if additional funds were available. These included smaller items such as blood pressure equipment, electric razors, and stereos, and larger items such as a handibus.

Other Issues

Sufficient revenue to meet ongoing program costs was a continuing concern for program managers. By far, the largest expenditures across all programs were for staff as might be expected in any service program. The fact that day programs involve a frail client group who need assistance and a range of services to maintain their health and independence requires staff able to meet their needs. The cost figures for rental of space may be somewhat misleading as the majority of day programs reported no costs for this item. Associated agencies, such as acute and long term care facilities were providing space in a number of cases without direct charges to the day program. Costs for equipment and supplies were relatively small for all programs. In the other category, important ongoing items for day programs such as meal and transportation costs are included. Even though clients constitute an important source of revenue and in most programs contribute directly to offsetting meal and/or transportation charges, such charges may be a deterrent for those for whom the charges would be a significant burden. Families sometimes actively discourage their relative who could benefit from a day program from enroling because of the cost of the program. In other cases, elderly people seem to have operated in a cost saving and 'doing without' mode throughout their lives, and thus have difficulty justifying the expenditure for a day program for themselves. Some programs in the province have had considerable difficulty becoming operational because of the deterrent effect of the daily charge. Rural sites, in particular, had more openings for clients (average 10.8 per site) than did urban sites (average 6.6 per site). Cost may have been a factor contributing to this difference. This issue bears further study.

REFERRAL AGENCY INFORMATION

The purpose of this portion of the study was to examine the linkage of adult day programs with referral agencies. In particular, information about the number of referrals, patterns of communication, and referral agency perceptions of adult day programs were sought.

CONNECTING WITH REFERRAL AGENCIES

Adult day program managers at each of the day programs in the study were asked to identify agencies making referrals to their program. The questionnaire was developed to meet the purposes of this study and consisted of seven open-ended questions. Questionnaires were sent by mail along with a covering letter explaining the study to the referral agencies from which the adult day program managers had reported receiving client referrals. Wherever possible the letter was addressed to the manager/director of the referral agency. Questionnaires were sent to 22 referral agencies. After the first mailout, 14 out of 22 forms (63.6%) were returned. A second mailout to those agencies who had not responded resulted in three additional questionnaires being returned for a 77.3% response rate. However, one of these was from an agency that stated it did not make any referrals to adult day programs and hence returned their questionnaire uncompleted. The final sample included responses from five Home Care agencies, three health units, five hospitals, and three other community programs. Completion and return of the questionnaire was interpreted as consent. Responses to each question were analyzed for content and summaries were compiled.

Examining the Linkages

Average Number of Clients Referred to Adult Day Programs

Referral agencies were asked to report the average number of clients referred from their agency to adult day programs each month (see Table 4.19). Four agencies reported referring less than one client per month to an adult day program. One agency referred one to two clients and two agencies referred three to four clients per month. Three agencies stated that five to six clients per month were referred by them. Two agencies referred seven to 10 clients and another two referred 10 or more clients a month. Finally, two agencies did not keep statistics on the number of clients

Table 4.19 Referrals to Adult Day Programs By Community Agencies

Average Number of Clients Referred to Adult Day Programs by Referral Agencies

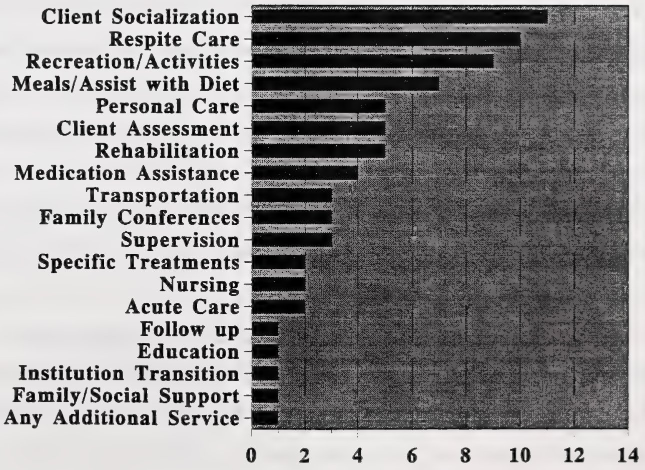
Number of Referrals per Month	Health Unit	Home Care	Hospital	Other Community Agency
<1	1		1	2
1-2		1		
3-4	1		1	
5-6	1	1	1	
7-10		1	1	
>10			1	1
Unknown		2		

referred to these programs. The number of clients referred varied substantially from month to month for some of the programs, and they reported the number of referrals in an average month. As well, some agencies referred to more than one adult day program and the number of clients referred to each program varied according to the needs of the clients and the services offered.

Beneficial Services of Adult Day Programs

Referral agencies were asked to identify what they believed were the beneficial services offered by adult day programs. A summary of the responses are included in Figure 4.11. The most frequent responses included respite care and relief of the burden placed on caregivers, socialization and stimulation of the client, the provision of meals and dietary assistance, and the opportunity for the client to participate in recreational activities, crafts, hobbies, and

Figure 4.11. Beneficial Services of Adult Day Programs



activities which develop skills. Other commonly perceived benefits were the provision of personal care such as bathing and assistance with medications by day program staff, and rehabilitation through physical and occupational therapy. Some of the other services that were mentioned once or twice included information and education of clients and/or caregivers, specific treatments (e.g. treatment of ulcers), family support/social services, care for clients who are waiting placement, and helping ease the transition from the community to institutional placements. One hospital stated that the day programs were beneficial as they themselves did not have the staff or facilities to offer any specialized programs for their long term elderly clients.

Services Needed at Day Programs

The referral agencies were asked to identify services from which they believed their clients would benefit which were not currently available in adult day programs. One of the themes that was identified was the limited availability of day programs. This was mentioned in various ways by different agencies. Four agencies felt that the programs would be more beneficial if they were offered more days a week and/or could have extended hours during the day. It was believed that this would allow caregivers who had day jobs to continue working. Two other agencies felt that the day programs would be more beneficial if they had night and evening hours for those clients who could not be left alone during this time of day. Two agencies felt that there either needed to be more spaces in existing day programs or that more day programs were needed in general. Four agencies saw a need for occupational, physical and/or recreational therapy services. Three agencies felt that mental health assessment and follow-up counselling services would be beneficial for those clients who required this service. Two agencies mentioned a need for professionally organized exercise programs with staff available to assist clients needing help while participating in such a program. Two agencies stated that transportation services were either unavailable, too expensive, or difficult to coordinate, and that better transportation would benefit their clients. Some other unavailable services mentioned were one-on-one programming, programs for younger adults, support for brain injured clients, social work services, support groups for clients and caregivers, group therapy programs for mentally ill clients, foot care, group activities and day trips, sheltered environments for clients with dementia, and sheltered workshops for schizophrenic clients. Two agencies also expressed a need for day program staff to be involved in ongoing education about specific client conditions.

Accessing Adult Day Programs

Eight agencies reported excellent access to day programs with a few stating there were problems in doing so on rare occasions. A lack of space in day programs was a difficulty stated by four agencies and long waiting lists were a problem for two agencies. One agency stated that problems arose because clients could not attend the program daily. Such a restriction did not help caregivers who worked full time. One agency stated the lack of funding for day programs caused difficulties in providing spaces for their clients. Two agencies felt the cost of attending day programs was a source of difficulty for some of their clients. As well, two other agencies thought the eligibility criteria made it difficult for some of their clients to attend. Transportation to day programs for one agency was a source of difficulty as it was either unavailable and/or too costly for some of their clients.

Communication between Agencies and Adult Day Programs

The most frequent form of communication reported by 11 of the agencies was through phone conversations. Forms or letters were used by seven of the agencies to relay information about clients and/or services offered by the day program. Seven agencies also reported that information was exchanged during case conferences. Some other forms of communication between the agencies and the adult day programs mentioned were meetings, inservice education sessions, and the provision of brochures and pamphlets by various day programs. One agency stated that there was minimal communication between them and the day program and there was no specific contact person. One agency also stated that the only communication they receive is through their client's family. The lack of communication regarding physical and occupational therapy assessments was frustrating according to one agency. It was difficult for them to determine what the adult day program had done and what Home Care had done. They also stated that it was difficult to get the prerequisite forms completed on non-Home Care clients due to time constraints.

Improvement of Adult Day Programs

Most comments in this section focused on the availability of and access to day programs. Improved transportation in both city and rural areas was an area where four agencies felt there could be improvement. Three agencies felt that better funding would improve the adult day programs to which they refer their clients. Four agencies expressed the need for more adult day programs and another four felt that extended hours and/or more days during the week would improve the day programs in their area. One agency commented that there could be more flexibility offered to clients in attending full or half days or in the number of days a week a client could attend. For one agency shorter waiting lists were identified as a way of improving the particular day program to which they made referrals. It was suggested by one agency that the length of stay should be based on need and not on time limits. One agency also felt that there should be fewer admission criteria so that more of their clients could attend. Another suggestion by one agency to help clients who could not afford the day program was the implementation of a sliding scale for program fees and to waive the cost for clients who financially could not meet the requirements.

Services that the agencies felt would improve the adult day program in their area were social programs for the cognitively impaired, physical therapy, therapeutic services, nursing care, hairdressing, programs for the physically handicapped, and a variety of group programs tailored to client capabilities and needs. In the area of communication two agencies stated that they would have liked case conferences between themselves and the day program. One agency would have liked feedback from the day program on a daily basis. Lastly, one agency reported that day programs should be more community based rather than institutionally based.

Additional Comments

In addition to the questions asked in the questionnaire, a section for additional comments was provided. Additional comments were of both a positive and negative nature. According to one agency, day programs should provide more than custodial care. Another commented that there should be allowances made for frail clients such as incorporating client rest periods during the day and administration of medications. Another agency claimed that there was a need for standards for both adult day support and day hospital programs. According to one agency, language was cited as a barrier in programs geared toward English as this screened out ethnic groups. The application process required to attend an adult day program was repetitive, tedious, and required too many forms in the opinion of one agency. Another agency maintained that adult day programs would continue to become more necessary as the population 80 years and over continues to grow. Day programs, as noted by still another agency, were vital in the continuum of care provision as they could prolong care at home, provide respite for caregivers, and delay institutionalization.

Chapter 5:
Profile of Adult Day Program Clients

CHAPTER 5: PROFILE OF ADULT DAY PROGRAM CLIENT POPULATION

SELECTING THE CLIENTS

The intent in this part of the program evaluation was to obtain a detailed description of the types of clients attending day hospital and day support programs in Alberta. A Client Information Form was completed by site staff for all clients who attended one of the nine adult day support programs or five adult day hospital programs during a three month period of time. In total, questionnaires were completed for 571 clients. A breakdown of the number of clients by program is included in Figure 5.1. In Table 5.1, a summary of the number of clients by model of care (day hospital/day support), geographical location (urban/rural), and program type (comparison/demonstration) is provided. The number of clients in day hospital and day support programs was similar. However, urban clients outnumbered rural clients, and there were a greater number of clients in comparison sites than demonstration sites.

Figure 5.1. Number of Clients in Study by Program

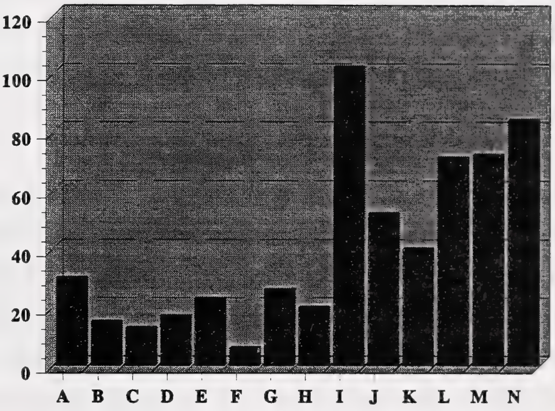


Table 5.1 Number of Clients in Study

Model of Care		Program Type		Geographical Location	
Day Hospital	Day Support	Demonstration Sites	Comparison Sites	Rural Sites	Urban Sites
273 (52.2%)	298 (48.0%)	150 (26.0%)	421 (73.7%)	101 (17.7%)	470 (82.3%)

CLIENT INFORMATION

The Client Information Form was developed for the purposes of the study (see Appendix C). It incorporated a number of items describing the client including demographic characteristics, utilization of community support services, sources of income, number of days in acute and long term care facilities, number of physician visits, support systems, and services received in the program. In the pilot study, it was found that most of the items showed good reliability ranging from 75 to 100% agreement across the two time measures. There were several items including number of days in acute care and number of physician visits in the last year for which test-retest reliability measures were relatively low. However, correlations between these items were high, suggesting that minor variations in recall on the part of the client may have affected the responses. Also incorporated in the client information form were several questions from the Alberta Assessment and Placement Instrument. As noted earlier, there was little reliability on the question concerning ineffective coping in the pilot study. Staff received verbal and written information to assist them in completing the questionnaires. The investigators and the project coordinator for the project were available for ongoing assistance throughout the data collection process.

Sources of information included client records at the adult day programs and if clients had a current AAPI, it was used to complete the AAPI questions. Frequencies, other descriptive statistics and tests of significant differences (Chi square, t-test, ANOVA) were calculated using the SPSS for Windows software package. Unlike the program data, statistical tests were applied to client data because sample sizes were generally sufficient. Open-ended questions were analyzed for content. Throughout this chapter, comparisons between programs are made by model of care (day hospital/ day support), program type (comparison/demonstration), and geographical location (rural/urban), as well as by selected demographic variables.

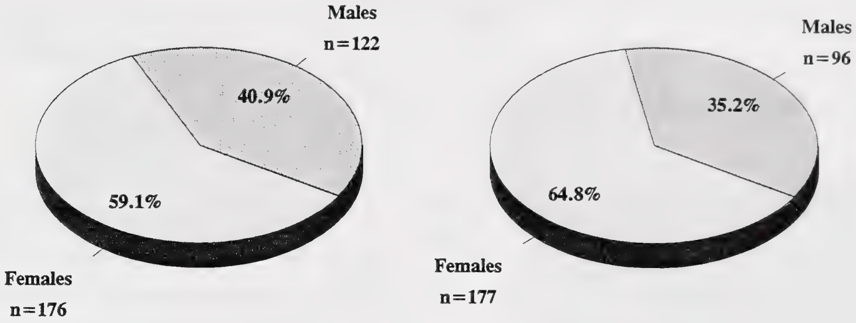
DISCOVERING THE TRAITS OF ADULT DAY PROGRAM CLIENTS

Demographic Information

Gender of Clients

The full complement of clients was comprised of 38.2% men and 61.8% women. Men accounted for 35.2% of all clients in day hospital programs and a slightly higher proportion in day support programs at 40.9% (see Figure 5.2). This difference was not statistically significant. Neither the proportion of men and women in comparison and demonstration sites, nor rural and urban sites differed significantly (see Figures 5.3 and 5.4).

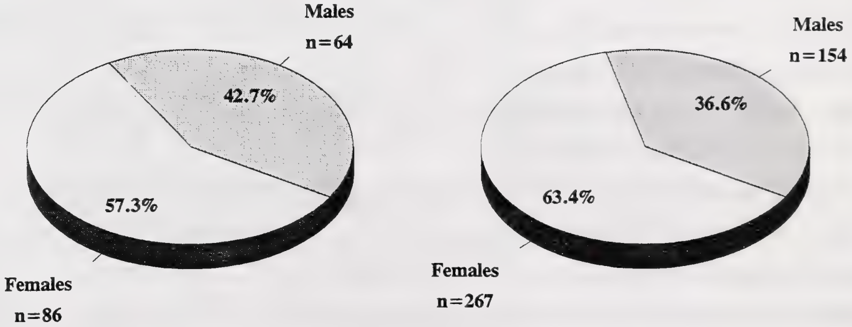
Figure 5.2. Gender of Clients by Model of Care



Day Support

Day Hospital

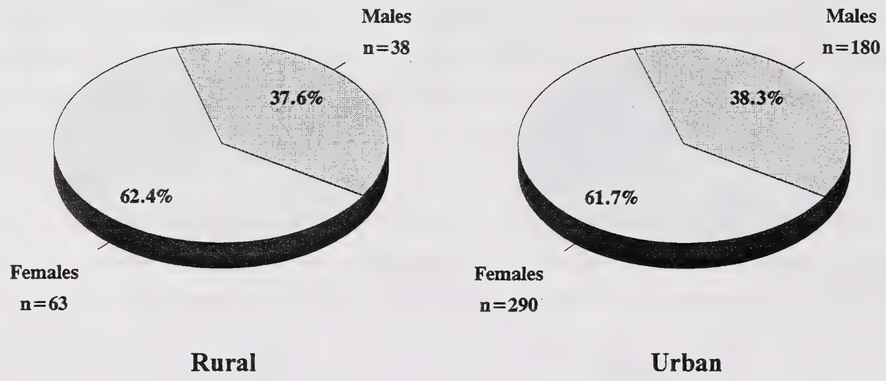
Figure 5.3. Gender of Clients by Program Type



Demonstration

Comparison

Figure 5.4. Gender of Clients by Geographic Location



Age of Clients

The age of clients ranged from 23 to 96 years and averaged 73.9. Men, on average, were 73.0 years old, compared to women who were slightly older at 74.5. The difference in the average age of clients between day hospitals and day support programs was statistically significant (t=-3.75, p<.01). At 72.3 years, those in day support programs were, on average, 3.5 years younger than those attending day hospitals who averaged 75.8 years of

Table 5.2 Number of Clients in Study by Age Group

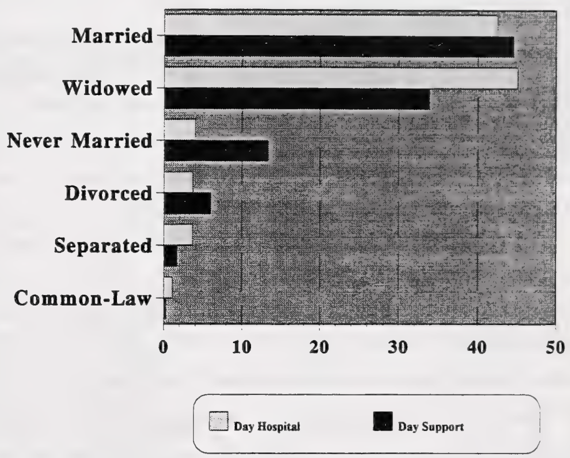
Age Group	Number	Percent
<50 Years	23	4.0
50-64 Years	68	12.0
65-74 Years	160	28.0
75-84 Years	238	41.7
85 and Older	79	13.8
Missing	3	0.5

age. There were no significant differences between the average age in years of clients in comparison (74.0) and demonstration (73.6) programs or in rural (72.3) and urban (74.3) sites. A breakdown of the number of clients in varying age groups is provided in Table 5.2. Over half of the clients (55.5%) were over the age of 75 years. Only a small number, less than five per cent, were under the age of 50. In adult day programs, the proportion of men and women in each of the age groups did not differ significantly and as noted above, the average age of men and women attending adult day programs was not significantly different.

Marital Status

In the total group, 8.9% had never been married, 43.6% were currently married, 39.2% were widowed, 7.5% were separated or divorced, and 0.7% were in common-law relationships. There was a significant difference in the marital status patterns between the day hospital and day support groups ($\chi^2=23.7$, $p<.01$) with a higher proportion of never married and divorced individuals and fewer widowed and separated individuals in adult day support programs compared to adult day hospital programs (see Figure 5.5). The percentage of married individuals and those in common-law relationships in each of the models of care was quite similar. This finding for unmarried individuals might be an indicator of the fact that those who live alone have fewer resources in terms of the availability of daily assistance and social interaction. Marital status did not differ significantly between the rural/urban groups or the demonstration/comparison groups.

Figure 5.5. Marital Status by Model of Care



As might be expected, marital status also differed by age, with older individuals being more likely to be either widowed, separated, or divorced, and younger individuals more likely to be never married or married ($\chi^2=112.7$, $p<.01$). Men in the group were more likely than women to never have been married, while women in the group were more likely to be widowed than men. The number of widows was 54.7% compared to only 14.2% who were widowers. These differences were statistically significant ($\chi^2=104.6$, $p<.01$) indicating that marriage patterns are such that men in these age groups are considerably more likely to have a partner than are women, a situation which may have important implications for the care of the frail elderly.

Education

The level of education for clients ranged from no formal education to post secondary. A small percentage of the group had received no formal education, while most had completed between seven and 12 years of education (see Table 5.3). There were no significant differences in education patterns between the two models of care, comparison and demonstration sites, or rural and urban clients. Further, there was no significant differences between female and male clients on this variable. However, older individuals were more likely to have completed either no formal education or only grades 1 to 6 ($x^2=44.3$, $p<.01$) (see Table 5.3). This finding is consistent with the norms for this age group given that opportunities for education were much less available for this group of people.

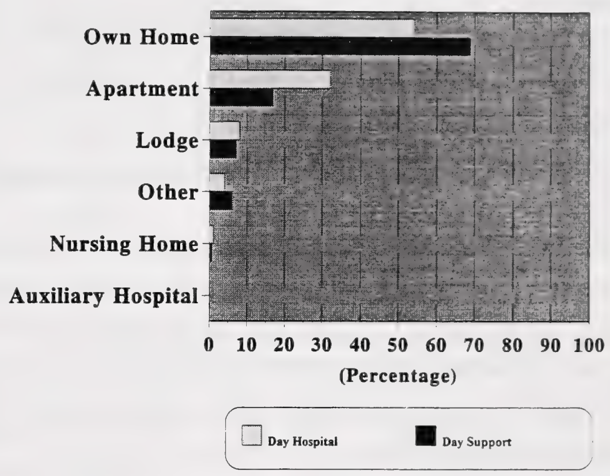
Table 5.3 Level of Education by Age Group

Age Group	No Formal	Grades 1-6	Grades7-9	Grades 10-12	Post-Secondary
<50 Years	0 (0.0%)	2 (8.7%)	4 (17.4%)	13 (56.5%)	4 (17.4%)
50-64 Years	0 (0.0%)	3 (6.0%)	17 (34.0%)	17 (34.0%)	13 (26.0%)
65-74 Years	5 (1.1%)	20 (13.8%)	49 (33.8%)	49 (33.8%)	23 (15.9%)
75-84 Years	9 (1.9%)	39 (20.0%)	52 (26.7%)	52 (26.7%)	33 (16.9%)
85 and Older	6 (1.3%)	16 (28.1%)	9 (15.8%)	9 (15.8%)	18 (31.6%)
Total	**20** **(4.3%)**	**80** **(17.0%)**	**139** **(29.6%)**	**140** **(29.8%)**	**91** **(19.4%)**

Place of Residence

Most (89.5%) clients in adult day programs lived in urban centres, 9.1% lived in rural areas and 1.4% lived on farms. A higher percentage (18.2% versus 0.4%) of participants from rural communities and farms attended adult day support programs compared to day hospital programs. Urban residents comprised 99.6% of adult day hospital programs, but only 81.8% of adult day support programs, a difference which was statistically significant ($x^2=42.8$, $p<.01$). The difference in type of program attended and place of residence is likely due to the greater availability of day support programs than day hospital programs to rural residents. As would be expected most clients (99.0%) of urban programs lived in urban settings. This is contrasted with only 47.4% of clients attending a rural program being from an urban setting ($x^2=221.2$, $p<.01$). At demonstration sites 58.2% of clients resided in an urban area, while 99.2% of those in comparison sites lived in an urban centre, a significant difference ($\times^2$=167.6, p<.01). There were no significant differences found between gender and place of residence (rural/urban/farm).

Figure 5.6. Place of Residence by Model of Care



Most participants in adult day programs lived in their own homes (61.9%). Some 24.2% lived in apartments, 7.6% in lodges, 0.9% in nursing homes, 0.4% in auxiliary hospitals, and 5.1% had some other form of living arrangement. There was a difference in the pattern of living arrangements between the two groups of day programs, with those in adult day support programs having a higher proportion of clients residing in private homes, and a smaller proportion living in apartments ($\times^2$=20.1, p<.01) (see Figure 5.6). No differences were apparent in the type of lodging between men and women. The finding that there was a difference in place of residence between the two types of day programs may indicate that day programs are fulfilling their objectives with day support programs, in particular, providing some early intervention for those maintaining residence in private homes.

The average length of time during which clients had resided in their current home averaged 12.9 years, and ranged from less than one month to over 60 years. No differences by model of care or geographical location were noted for this variable. However, clients at demonstration programs had lived for a shorter time at their current place of residence, averaging 123 months, than had clients at comparison sites who averaged 168 months (t=-2.75, p<.01). No significant differences were evident between this variable and either gender or age.

On average, 33.1% of these adult day program clients lived alone, 39.4% lived with their spouse, 16.0% lived with family members, and 11.4% lived with someone other than family. Those in adult day support programs were significantly more likely to live with another person ($\times^2$=30.3, p<.01), while those in adult day hospital programs were almost twice as likely to live alone (see Table 5.4). More urban than rural clients lived alone (35.1% versus 23.8%) or with family (16.3% versus 14.9%) and slightly more rural clients lived with a spouse (41.6% versus 39.0%) ($\times^2$=11.0, p<.05).

Table 5.4 Living Situation by Model of Care

Living Situtation	Day Hospital	Day Support	Total
Lives Alone	117 (43.2%)	71 (23.9%)	**188** **(33.1%)**
Lives with a Spouse	103 (38.0%)	121 (40.7%)	**224** **(39.4%)**
Lives with Family	29 (10.7%)	62 (20.9%)	**91** **(16.0%)**
Other	22 (8.1%)	43 (14.5%)	**65** **(11.4%)**

Comparison site clients were more likely to reside alone than demonstration clients ($\times^2=19.4$, $p<.01$). Women were significantly more likely than men to live alone or with family members other than their spouse than men ($\times^2=83.5$, $p<.01$) (see Figure 5.7). Also older individuals were more likely to live alone and less likely to live with a spouse (see Table 5.5). Those who were under 50 and those who were over 85 were more likely to live with family members other than a spouse, than those in the other age groups ($\times^2=63.2$, $p<.01$). For approximately 10.2% of this group it was believed by the staff member who completed the form that the client's current physical accommodation was inadequate. No significant differences on this variable between the day hospital and day support groups, the demonstration and comparison clients, or the rural and urban sites were apparent.

Figure 5.7. Living Situation by Gender

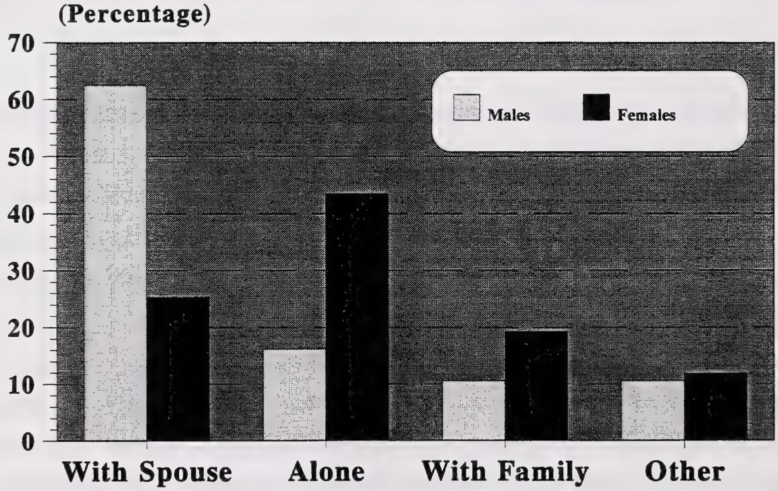


Table 5.5 Living Situation by Age Group

Living Situation	<50	50-64	65-74	75-84	85 or Older
Lives Alone	2 (8.7%)	8 (11.8%)	52 (32.5%)	89 (37.9%)	37 (46.8%)
Lives with a Spouse	9 (39.1%)	40 (58.8%)	66 (41.3%)	93 (39.6%)	15 (19.0%)
Lives with Family	7 (30.4%)	3 (4.4%)	28 (17.5%)	35 (14.9%)	18 (22.8)
Other	5 (21.7%)	17 (25.0%)	14 (8.8%)	18 (7.7%)	9 (11.4%)

Occupation

The present or past occupation of clients who attended an adult day support or day hospital program was reported as follows: professionals, 7.7%; proprietors or office managers, 7.9%; semi-professionals, 6.0%; clerical/sales, 10.8%; skilled workers, 8.3%; semi-skilled workers, 12.2%; unskilled workers, 12.6%; farmers, 12.6%; homemakers, 19.9%; never in work force, 2.1%. There was a statistically significant difference in the pattern of occupations between the two groups, with adult day support programs showing a higher proportion of farmers, and slightly higher proportion of skilled, semi-skilled, and unskilled workers, as well as persons who had never been in the work force ($\times^{2}=17.0$, $p<.05$) (see Table 5.6). Undoubtedly this finding reflects the fact that day support programs were more available in small towns than day hospitals and therefore were more accessible by rural residents than day hospitals.

Table 5.6 Occupation by Model of Care

Occupation	Day Hospital	Day Support	Total
Clerical/Sales	34 (13.4%)	18 (7.8%)	**52 (10.8%)**
Farmer	25 (9.9%)	36 (15.7%)	**61 (2.6%)**
Homemaker	52 (20.6%)	44 (19.1%)	**96 (19.9%)**
Never in the Work Force	2 (0.8%)	8 (3.5%)	**10 (2.1%)**
Professional	23 (9.1%)	14 (6.1%)	**37 (7.7%)**
Proprietor/Office Manager	25 (9.9%)	13 (5.7%)	**38 (7.9%)**
Semi-professional	16 (6.3%)	13 (5.7%)	**29 (6.0%)**
Semi-skilled	28 (11.1%)	31 (13.5%)	**59 (12.2%)**
Skilled	18 (7.1%)	22 (9.6%)	**40 (8.3%)**
Unskilled	30 (11.9%)	31 (13.5%)	**61 (12.6%)**

The type of occupation differed significantly by age, with those who were oldest more likely to report that their past or present occupations were as farmers or homemakers ($\times^{2}=54.9$, $p<.01$). Men outnumbered women in the professional, labourer, and farmer categories of occupation. Women were more likely to report having been employed in clerical work, as homemakers, or never having been in the work force ($\times^2$=121.7, p<.01).

Language

The client population was predominantly English speaking, with 93.3% listing English as their language of choice. There was no difference between those in day hospital and day support programs on this variable. In comparison sites, 92.1% reported English as their language of choice, compared to 96.6% in demonstration sites. This difference approached significance ($\times^2$=3.62, p=.06). Urban clients reported English as a first language in 92.1% of cases, compared to rural clients at 97.0%, a non-significant difference. Neither gender nor age were significantly related to language.

Sources of Government Income

A small proportion of adult day program participants received either social assistance, Alberta Assured Income for Severely Handicapped (AAISH), or the Widow's Allowance (see Table 5.7). Guaranteed income supplements (GISs) or Alberta Assured Income Plans (AAIPs), Old Age Security (OAS), and Canada Pension Plan (CPP) were reported more frequently. Approximately 11.3% received some other form of government income such as a provincial pension. Younger individuals were more likely to be receiving AAISH or social assistance (see Table 5.7). Older individuals more often reported receiving OAS and CPP, although receipt of CPP declined in the oldest age group, those over 85 years of age. These results are consistent with the eligibility for CPP being contingent upon contributions through employment since the inception of CPP in 1966. The proportion of individuals receiving Widow's Allowance did not vary significantly across age groups.

Table 5.7 Sources of Government Income by Age Group

Source	Total	< 50	50-64	65-74	75-84	85 or Older	Chi Square	Significance
AAISH	**32 (5.7%)**	10 (43.5%)	12 (17.6%)	5 (3.2%)	4 (1.7%)	1 (1.3%)	90.33	**p < .01
CPP	**254 (45.4%)**	4 (17.4%)	23 (33.8%)	87 (55.8%)	112 (47.7%)	28 (36.4%)	20.74	**p < .01
GIS/AAIP	**148 (26.5%)**	0 (0.0%)	6 (8.8%)	42 (26.9%)	75 (31.9%)	25 (32.5%)	24.17	**p < .01
OAS	**373 (66.7%)**	0 (0.0%)	6 (8.8%)	120 (76.9%)	187 (79.6%)	60 (77.9%)	177.93	**p < .01
SOCASS	**10 (1.8%)**	5 (21.7%)	3 (4.4%)	2 (1.3%)	0 (0.0%)	0 (0.0%)	60.68	**p < .01
Widow's Allowance	**25 (4.5%)**	1 (4.3%)	3 (4.4%)	8 (5.1%)	11 (4.7%)	2 (2.6%)	0.82	p = .94

Table 5.8 Sources of Government Income by Gender

Source	Men	Women	Chi Square	Significance
AAISH	8 (3.8%)	24 (6.9%)	2.42	p=.12
CPP	119 (55.9%)	136 (39.1%)	15.02	**p<.01
GIS/AAIPS	37 (17.4%)	111 (31.9%)	14.35	**p<.01
OAS	136 (63.8%)	238 (68.4%)	1.23	p=.27
SOCASS	6 (2.8%)	4 (1.1%)	2.10	p=.15
Widow's Allowance	2 (0.9%)	23 (6.6%)	9.98	**p<.01

In Table 5.8 the breakdown of government sources of income by gender is reported. A difference between gender and sources of income was noted for Widow's Allowance with more women than men in this study receiving Widow's Allowance. Women were also more likely than men to be receiving GISs or AAIPs. Men were more likely to be receiving Canada Pension Plan income. These findings reflect the lower income levels of elderly women living alone than the men in the day program population, most of the latter having partners.

Legal Decision-Making Status

Less than one quarter (22.1%) of the adult client population had an appointed guardian, trustee, or power of attorney, and 77.9% had no one appointed to make decisions on their behalf. Power of attorney had been arranged for 12.7% of clients, guardianship for 7.4%, and trusteeship for 2.0%. In the adult day support group, there was a significantly higher proportion of individuals with guardians, trustees, and powers of attorney. In adult day support programs 32.8% had an appointed decision maker, compared to 11.2% of those in adult day hospital programs ($\times^2$=37.3, p<.01). Significantly more clients at demonstration sites than comparison sites reported having someone appointed to make decisions on their behalf, 37.2% versus 16.5% ($\times^2$=32.0, p<.01). There were no rural/urban differences on this variable. The client's likelihood of having an appointed guardian, trustee, or power of attorney did not differ significantly by gender or age. Given that day support programs accommodate a larger proportion of clients with decreased cognitive abilities, compared to day hospital programs, these findings are likely reflective of this situation.

Health Status

Medication Usage

The average number of medications, including both prescription and non-prescription drugs, reported to be used by clients was 5.0 and ranged from 32 persons reporting using no medications at all, to one individual indicating regularly taking 17 different medications. Almost 10% of the client group indicated they took more than 10 medications on a daily basis. More than half (50.9%) indicated they took five or more medications daily. The average total number of medications was significantly higher for the day hospital group which may reflect a higher level of physical illness in this group (see Table 5.9). There was no significant difference in the number of medications reported by those clients in rural and urban sites, or when comparing the number of medications reportedly taken by clients in demonstration and comparison sites.

Table 5.9 Average Number of Medications by Model of Care

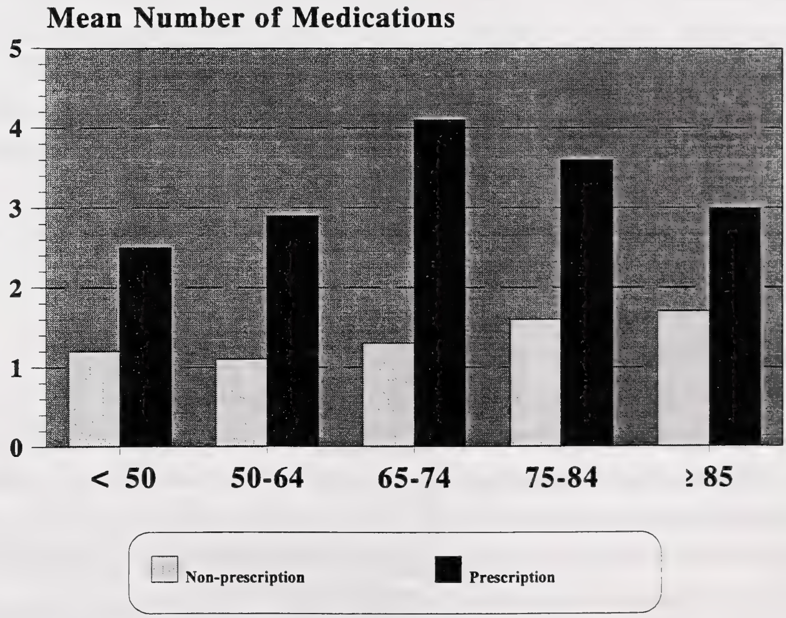
Medications	Day Support	Day Hospital	Total Average	t-test	Significance
Prescription	2.9	4.3	3.6	-4.28	**p<.01
Non-Prescription	1.2	1.7	1.4	-6.61	**p<.01
Total	**4.1**	**6.0**	**5.0**	**-7.24**	****p<.01**

The average number of prescription medications reported by clients was 3.6 and this number ranged from zero to 16. Those in the adult day hospital group reported more medications than those in adult day support programs. At comparison sites, clients reported taking an average of 3.7 medications compared to 3.2 at demonstration sites, a difference that was significant (t=-2.22, p<.05), most likely a reflection of the larger proportion of day hospitals in the comparison site group. The number of prescription medications did not differ by geographical location (rural/urban). The average number of non-prescription medications for adult day program clients was 1.4 and ranged from zero to eight. For adult day support clients this figure was lower than for day hospital clients. There were no significant differences between the number of non-prescription medications taken by clients in rural versus urban, or comparison versus demonstration sites.

There were no significant differences between the number of medications, prescription or non-prescription, reported by men and women, and none based on levels of education and the number of non-prescription medications reported. However, the level of client education and the number of prescription medications reported approached significance, with those in the lowest and highest education groups reporting fewer medications (averaging 2.9 and 3.1 respectively) while those in between reported higher numbers (ranging from 3.7 to 4.0). The number of prescription or non-prescription medications reported by clients did not seem to differ in the presence or absence of a caregiver. Also, no differences were noted between the number of reported non-prescription medications and client living arrangements. However, the difference in number of prescription medications by living arrangements was significant with those living with a spouse reporting the highest average number of prescription medications at 3.8, followed by those who lived alone at 3.6, those who lived with someone other than family at 3.2, and those living with other family members reporting the lowest average at 3.0 (F=2.56, p<.05).

The number of medications taken by clients was analyzed by age group. Those in the 50 to 64 year old age group reported taking significantly fewer medications than those in the category of 65 to 74 and 75 to 84 age groups (F=3.33, p<.05) (see Figure 5.8). There were no significant differences between the age groups when the number of non-prescription medications were compared, however those in the middle age group, between 65 and 74 years of age, reported significantly higher number of prescription medications than all of the other age groups except those in the 75 to 84 year old group.

Figure 5.8. Medication Usage by Age Group



Type of Medications

The types of medications clients were taking were classified into one of 99 groups based on a standard classification system used in the Nursing 93 Drug Handbook (1993) (See Appendix O). Of the 2746 medications listed, laxatives accounted for 9.5%, non-narcotic analgesics for 9.3%, vitamins and minerals for 6.4%, antianginals for 5.9%, antidepressants for 5.7%, diuretics for 4.8%, antihypertensives for 4.1%, and antiulcer agents for 4.0%.

In this client group, 39.4% of clients reported regularly taking a non-narcotic analgesic, 30.1% were taking some form of laxative, 26.1% were taking an antidepressant, 22.8% were taking some form of vitamin, 22.2% were taking diuretics, 21.5% were taking anti-anginal medication, 18.2% were taking an anti-hypertensive drug, 17.7% were taking an anti-ulcer drug, and 16.1% reported taking a non-steroidal anti-inflammatory medication.

These 99 groups of medications were collapsed further into 17 categories organized on the basis of body system/physiological functioning. The most frequent types of drugs reported included the following: central nervous system drugs, 32.8%; gastrointestinal drugs, 16.0%; cardiovascular system drugs, 13.3%; fluid and electrolyte medications, 7.9%; hormonal drugs, 7.3%; and nutritional agents for 6.4%. A complete listing of categories of medications is provided in Table 5.10.

Table 5.10 Medication Usage of Adult Day Program Clients

Category	Count	Percent of Responses*	Percent of Cases**
Anesthetics	2	0.1	0.4
Antimicrobials	44	1.6	8.5
Antineoplastics	9	0.3	1.7
Autonomic Nervous System Drugs	25	0.9	4.9
Cardiovascular Drugs	365	13.3	70.9
Central Nervous System Drugs	902	32.8	175.1
Dermatomucosal Drugs	39	1.4	7.6
Eye, Ear, Nose, and Throat Drugs	53	1.9	10.3
Fluid and Electrolyte Drugs	216	7.9	41.9
Gastrointestinal Drugs	439	16.0	85.2
Hematological Drugs	55	2.0	10.7
Hormonal Agents	201	7.3	39.0
Immunomodulation Agents	3	0.1	0.6
Nutritional Agents	176	6.4	34.2
Respiratory Tract Drugs	59	2.1	11.5
Classification Unknown	62	2.3	12.0
Miscellaneous	96	3.9	18.6
Total	**2746**	*****99.9**	**n=515**

*Percent of responses represents the number of medications reported for each category divided by the total number of medications reported (2746).

**Percent of cases represents the number of medications reported for each category divided by the number of clients in the sample (n=515).

***Rounding error.

Diagnoses

Diagnoses were classified according to the International Classification of Diseases, 9th revision, Clinical Modification (ICD-9-CM) (See Appendix P). The World Health Organization developed this classification system to ensure consistency in reporting of mortality and morbidity statistics throughout the world. Respondents were asked to report up to five different diagnoses. The average number of diagnoses listed was 3.2 and ranged from 0 to 5. As no more than five diagnoses could be listed, this average is likely lower than the true average due to the ceiling effect of limiting the number of diagnoses that could be reported.

The most frequent specific diagnoses reported were depression (22.9%), cerebrovascular accident (22.0%), hypertension (21.5%), osteoarthritis (17.4%), diabetes mellitus (14.6%), dementia (10.7%), Alzheimer's disease (8.5%) and Parkinson's disease (7.2%). The frequencies of diagnoses grouped into one of 14 categories is reported in Table 5.11. The findings here reflect a population suffering from multiple chronic diseases.

Table 5.11 Diagnoses of Clients

Diagnostic Group	Count	Percent of Responses*	Percent of Cases**
Blood Disorders	24	1.3	4.2
Circulatory Diseases	314	17.3	55.3
Digestive Disorders	109	6.0	19.2
Endocrine and Metabolic Disorders	142	7.8	25.0
Genitourinary Disorders	59	3.2	10.4
Infectious Diseases	3	0.2	0.5
Mental Problems	398	21.9	70.1
Muscoskeletal Disorders	245	13.5	43.1
Neoplasms	39	2.1	6.9
Neurological Motor Dysfunction	290	16.0	51.0
Pulmonary Disease	47	2.6	8.3
Sensory Disorders	129	7.1	22.7
Skin Disorders	18	1.0	3.2
Total	**1819**	**100**	**n=568**

* Percent of responses represents the number of diagnoses reported in each category divided by the total number of diagnoses (1819).
**Percent of cases represents the number of diagnoses reported in each category divided by the number of clients (n=568).

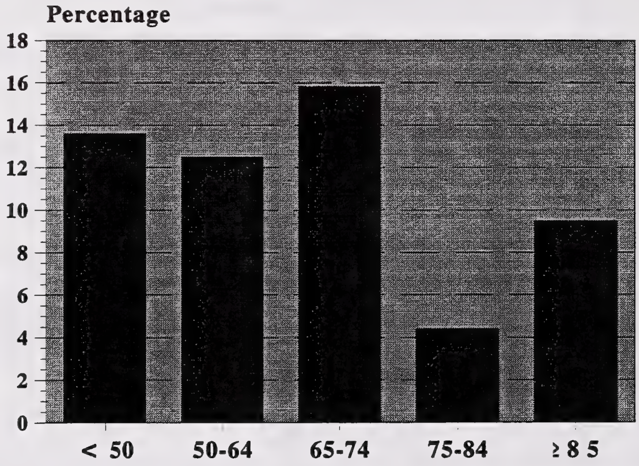
Number of Falls

Day program clients had on average fallen 4.0 times in the previous year. There was no significant difference between the number of falls reported by day support (4.0) and day hospital (3.9) clients. At demonstration sites clients averaged 6.5 falls in the previous year compared to 3.0 at comparison sites, a significant difference ($t=2.26$, $p<.05$). There were no urban/rural differences in the number of falls. No significant differences between men and women on this variable or between the various age groups were noted. Also, there were no differences noted between the number of falls and either a client's level of education, the presence of a caregiver, or the client's living arrangement.

Substance Abuse

Some form of substance abuse, predominantly alcoholism, was reported for 9.5% of the adult day program population. There were significantly more clients with a reported substance abuse problem in the day hospital group (13.8%) than in the day support group (5.1%) ($\times^2=11.5$, p<.01). There were no rural/urban or comparison/demonstration site differences on this variable. Significantly more men (12.9%) reported a substance abuse problem than women (7.4%)($\times^2=4.4$, p<.05). As can be seen in Figure 5.9, substance abuse was higher in the younger age groups. There were no differences noted between incidence of substance abuse problems and either the educational level of clients, their living arrangements, or whether or not they had an informal caregiver.

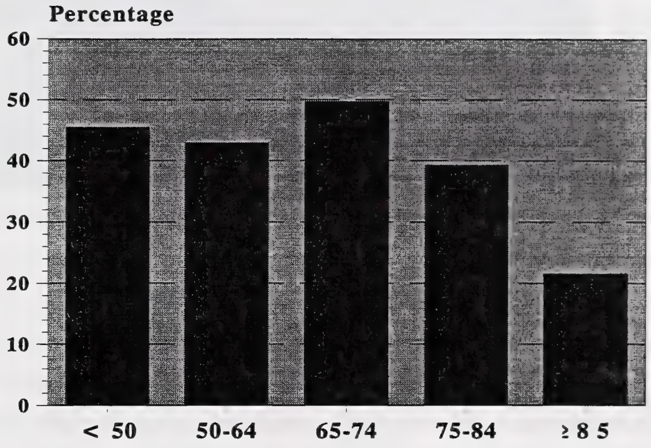
Figure 5.9. Substance Abuse by Age Group



History of Psychiatric Problems

Some 40.4% of adult day program clients reported a history of a psychiatric problem, with significantly more clients in the day hospital group (45.4%) than day support (35.3%) group reporting a psychiatric problem ($\times^2=5.6$, p<.05). This relatively large proportion of clients with a history of psychiatric problems is skewed by the fact that one of the day hospital programs in the study was limited to only clients with psychiatric/mental health problems, and one other day hospital and one day support program focused upon the cognitively impaired elderly. Over half (51.4%) of demonstration site clients reported a psychiatric problem, compared to 36.1% of comparison site clients ($\times^2=10.2$, $p<.01$). There were no notable rural/urban differences. There were significantly more women (43.7%) who had reported a history of psychiatric problems than men (35.0%) ($\times^2=3.9$, $p<.05$). The percentage of persons with a history of a psychiatric problem was largest in the 65 to 74 year old age group (see Figure 5.10).

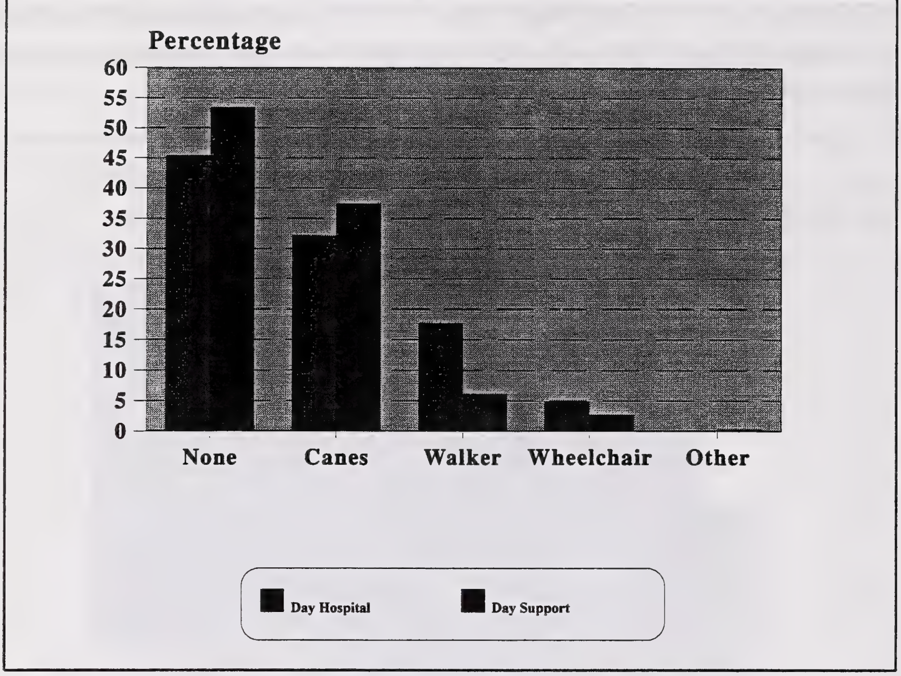
Figure 5.10. History of Psychiatric Problems by Age Group



Use of Ambulation Devices

Almost half (49.6%) of adult day program clients used no type of ambulation devices. A cane was utilized by 34.9%, a walker by 11.7%, and a wheelchair by 3.7%. In the adult day hospital group walkers and wheelchairs were more prevalent, while persons using canes or no type of device were less frequent ($\times^2=21.7$, $p<.01$) (see Figure 5.11). Clients at demonstration sites reported using fewer ambulation devices than clients at comparison sites, 40.7% versus 54.0%, respectively. Clients at comparison sites were more likely to use walkers ($\times^2=23.2$, $p<.01$). At urban sites clients reported a greater use of canes and walkers, while at rural sites more individuals used either wheelchairs or no device ($\times^2= 12.7$, $p<.05$). There was no significant difference between men and women on this variable. The type of ambulation device used varied across age groups. Although there were insufficient numbers to test for statistical significance across age groups, the trend noted was an increase in the use of canes or walkers in the older age groups, and a decrease in the use of wheelchairs with age. Mobility was thus a great problem for the clients of day programs and reflected the impact of chronic disease upon this population.

Figure 5.11. Use of Ambulation Devices by Model of Care



Alberta Assessment and Placement Instrument

AAPI Completed

The Alberta Assessment and Placement Instrument (AAPI) is a standardized assessment form used to determine appropriate referrals and placements for long term care clients. It is not currently required for admission to day hospital programs. It is a comprehensive health assessment tool which also addresses mental and psychosocial status. In this study several AAPI questions were used, and the results will be discussed in this section. Slightly more than half (53.3%) of the clients who attended an adult day program had a completed AAPI, and there were significantly more individuals with a completed AAPI in the day support group (64.0%) than in the day hospital group (38.0%) ($\times^2=33.2$, $p<.01$). Most clients (71.1%) at rural sites had a completed AAPI compared to 48.6% in urban sites. This difference was statistically significant ($\times^2=15.9$, $p<.01$). As well, 68.1% of those in demonstration programs compared to 47.1% in comparison sites had completed an AAPI ($\times^2=17.9$, $p<.01$). There were no significant gender differences on this variable. Those in the under 50 age group were most likely to have had an AAPI completed (73.9%), while those in the 50 to 65 age group were least likely to have an AAPI completed (35.4%). An AAPI had been completed for 53.3% of those aged 65 to 74 years, 56.6% of those aged 75 to 84 years, and 52.8% of those over age 85. There was a statistically significant difference between age groups and whether or not an AAPI had been completed ($\times^2=13.2$, $p<.05$).

Months Since Last AAPI Completed

For those who had a completed AAPI available, it had been on average 14.3 months since it was completed or last updated. For adult day support clients, it had been, on average, 14.8 months since their last AAPI was completed. Adult day hospital clients reported that their last AAPI had been completed an average of 12.8 months previously. This difference was not significant, nor were there significant differences between this variable and either gender or age. There were no urban/ rural differences in the months since the last AAPI was completed. However, in demonstration sites the average length of time since the last AAPI was significantly shorter than in comparison sites, 10.8 months compared to 16.2 months respectively ($t=-4.26$, $p<.01$).

Source of Information for AAPI Questions on Client Information Form

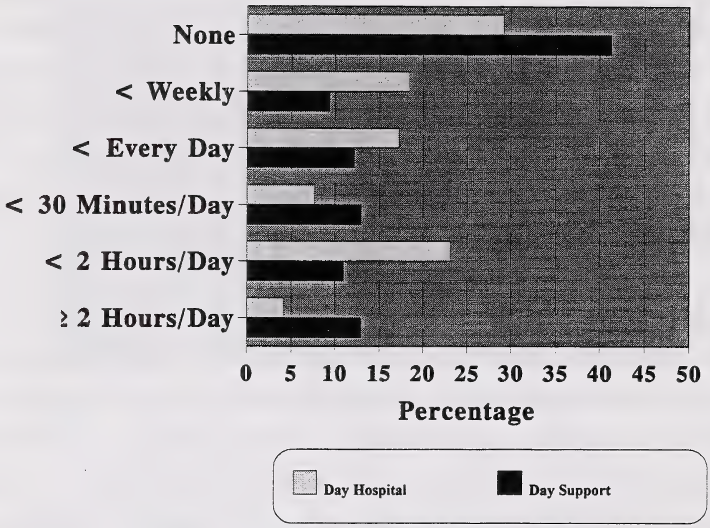
In 36.8% of cases, the AAPI questions on the client information form were answered using an already completed and current AAPI form. A further 12.5% were completed by an individual who had successfully completed a short training program in its use. The remaining 50.7% were completed by non-AAPI trained persons. In the adult day support group, the source of responses to questions was more likely to be from the AAPI, whereas it was more likely that the questions were completed by a non-AAPI trained person in the day hospital group ($\times^2=134.8$, $p<.01$). At demonstration sites (50.0%), the source of information for AAPI questions was more likely to be from a completed AAPI than at comparison sites (31.8%) ($\times^2=15.0$, $p<.01$). Rural sites more often reported that the source of information for the AAPI questions was a completed AAPI than did urban sites, 58.7% compared to 32.1% ($\times^2=24.6$, $p<.01$).

Ineffective Coping

Ineffective coping refers to a person's ability, or lack of ability, to deal with emotional and physical stress and takes into consideration such items as depression, anxiety, suspicion, and agitation. Clients were categorized into one of six classifications, ranging from no intervention required to more than two hours daily (see Figure 5.12). No intervention was required by 35.2% of the total group, while more than 30 minutes daily intervention was required by 25.7% of the group. There was a significant difference between those in adult day support programs who had larger numbers in the no intervention group, the less than 30 minutes daily group and the more than two hours daily group when compared to those in day hospital programs ($\times^2=41.0$, $p<.01$). At demonstration programs individuals required intervention for ineffective coping more often than comparison site clients, 73.0% compared to 61.5% ($\times^2=46.8$, $p<.01$). A higher percentage of rural clients (69.0%) required assistance than urban clients (63.8%) ($\times^2=14.2$, $p<.05$). Neither gender nor age were significantly related to the client's ability to cope. In the pilot study, the test-retest reliability of ineffective coping was very low at 8.3. Hence, the accuracy of findings for the ineffective coping item are suspect.

Figure 5.12. Ineffective Coping by Model of Care

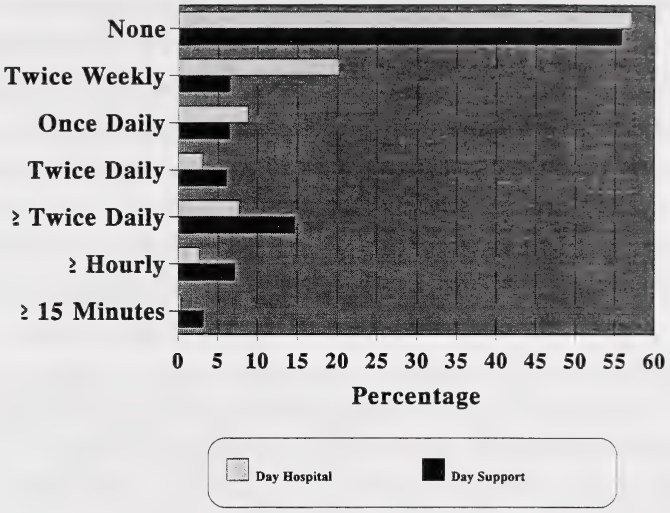
Frequency of Intervention



Potential for Injury to Self

Responses indicated that 6.9% of the adult day program population required observation at least hourly in order to prevent injury to self (see Figure 5.13). More than half (56.3%) were not believed to be at any risk for injury to self. A significantly larger number in the adult day support group (31.2% versus 14.0%) required intervention more than once daily ($\times^2$=39.8, p<.01). Clients at demonstration sites (61.1%) had a greater potential for injury to self than did clients at comparison sites (37.0%) ($\times^2$=45.5, p<.01). Rural clients were also at greater risk for injuring themselves than urban clients, 56.6% compared to 40.7% ($\times^2$=39.5, p<.05). The mean score of men on the potential for injury scale was 2.5, while the scores of women averaged 2.1, a significant difference (t=3.19, p<.01). Those who were older were not reported to be at a greater risk for potential self-injury. However, those who had caregivers were more likely to require more frequent intervention than those without caregivers ($\times^2$=24.0, p<.01). Few individuals (1.4%) without caregivers required twice daily or more frequent contact compared to 32.7% of individuals with caregivers. Similarly, individuals who lived alone, whose scores averaged 1.6, were less likely to require intervention than those who lived with others whose average score was 2.5 (t=-4.69, p<.01). There were no significant differences between educational levels and potential for injury noted. Clearly where injury to self was a concern, clients were living in more sheltered arrangements.

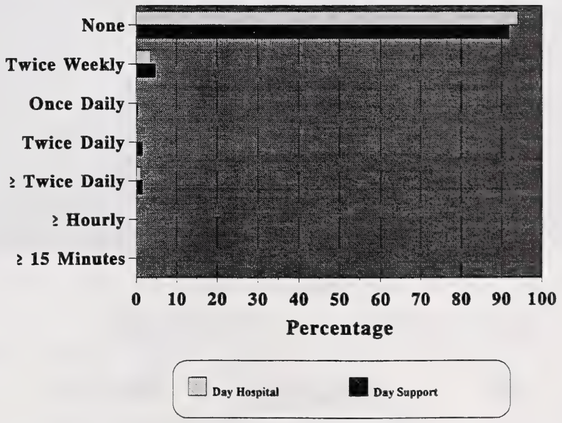
Figure 5.13. Potential for Injury to Self by Model of Care
Frequency of Intervention



Potential for Injury to Others

It was reported that 93% of the adult day program population was not at any risk for potentially injuring another person, and there was no significant difference on this variable by model of care (see Figure 5.14). Most clients (96.6%) in comparison sites were not at risk for injuring others. At demonstration sites 83.7% of clients were not at risk ($\times^2=37.5$, $p<.01$). There were no significant urban/rural differences in clients' potential for injury to others,nor were there any differences between this variable and either age or gender.

Figure 5.14. Potential for Injury to Others by Model of Care
Frequency of Intervention



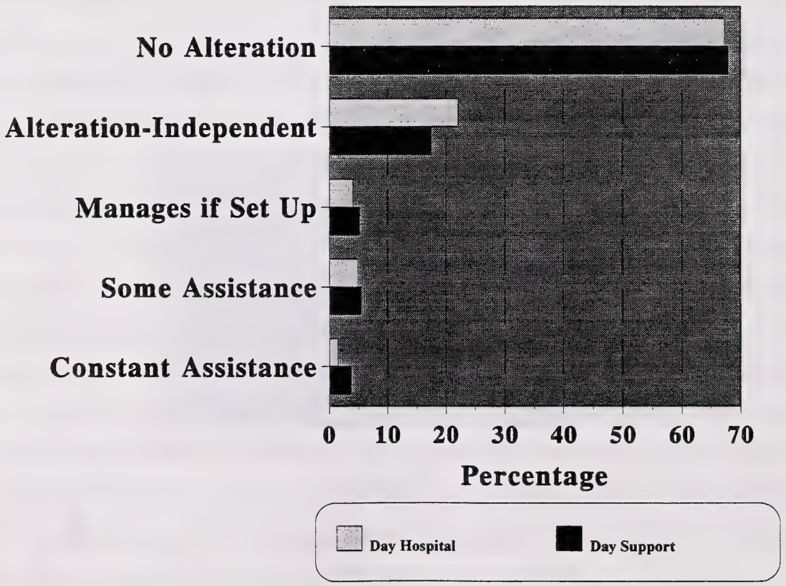
Type of Incontinence

Just under 10% of the population was described as suffering from stress incontinence. Urinary incontinence was a problem for a further 18.6%, and bowel incontinence for 4.4%. One person was reported as suffering from all three types of incontinence, six persons (1.1%) had both stress and urinary incontinence, and 16 persons (2.8%) reportedly had both urinary and bowel incontinence. This was another item which had lower test-retest reliability in the pilot study at 58.3. This variation may in part be related to the reluctance of clients to admit to having incontinence problems.

Management of Urinary Elimination

Most (87.4%) were able to manage their own urinary elimination independently. A further 4.7% could manage to go to the bathroom if the room and items needed by the client had been previously arranged and were easily accessible. Some supervision or assistance was required by 5.2%, and 2.7% were unable to manage and needed constant supervision or assistance. There were no significant differences between the day hospital and day support clients with respect to their management of urinary elimination (see Figure 5.15). Demonstration site clients were more likely than comparison site clients to need assistance in managing their urinary elimination (41.1% versus 29.2%) ($\times^2=20.8$, $p<.01$). There were no rural/urban differences on this variable. Neither were there significant differences in the client's ability to manage urinary elimination for either the variables of gender or age.

Figure 5.15. Management of Urinary Elimination by Model of Care

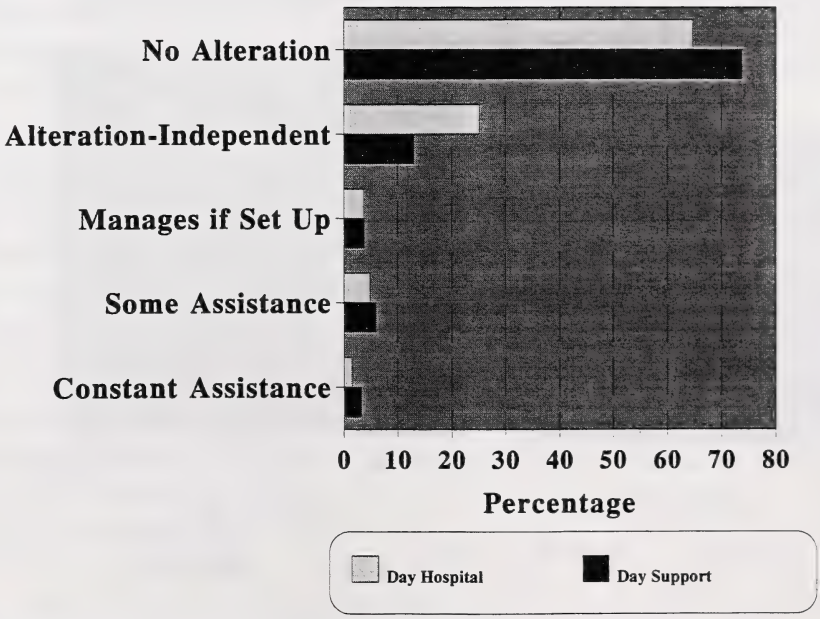


Management of Bowel Elimination

Again most (88.3%) were able to manage their own bowel elimination independently. A further 3.8% could manage if the room and items needed by the client had been previously arranged and were easily accessible. Some supervision or assistance was required by 5.5%, and 2.4% were unable to manage, needing constant supervision or assistance. There was a significant difference on this variable by model of care, with larger numbers in the adult day hospital group in the categories of no alteration, needs some supervision/assistance, and needs constant supervision/assistance ($\times^2$=14.1, p<.01) (see Figure 5.16). Clients at demonstration sites were also more likely to require assistance in managing their bowel elimination (34.5% versus 29.4%) ($\times^2$=15.6, p<.01). More clients (18.5%) at rural sites required assistance than at urban sites (10.2%) ($\times^2$=12.4, p<.05).

Those in the youngest group, that is those under 50 years of age were less likely to be able to manage their own bowel elimination independently and more likely to require total care. This difference was statistically significant ($\times^2$=36.2, p<.01). Many of those in the younger category suffered from serious brain injuries, degenerative muscle diseases, and other neurological disorders so this finding was not unexpected. Finally, there were no gender differences in the ability to manage bowel elimination.

Figure 5.16. Management of Bowel Elimination by Model of Care



Methods of Managing Elimination

In the client group, 9.8% followed a bladder routine, 11.9% had a bowel routine, 0.9% (5 individuals) had indwelling urethral catheters, 0.4% (2 individuals) had colostomies, 0.5% (3 individuals) had ileostomies, 0.2% (1 individual) had a ureterostomy, and 12.7% used incontinence supplies. As these numbers were quite small overall, comparisons were not made by model of care, program type, geographical location, or demographic variables.

Independence in Eating

Most (78.2%) clients in adult day programs were able to feed themselves independently (see Figure 5.17). A further 1.1% could manage independently with special devices. Those who were able to manage with assistance to prepare to eat comprised 14.3% of the group, those needing some supervision/assistance totalled 4.9%, and those needing the constant supervision/assistance of one or more persons comprised 1.5%. Those in adult day support programs were more likely to require assistance in eating than those in adult day hospital programs ($\times^2$=17.5, p<.01). More clients in comparison sites (79.6%) could feed themselves independently than in demonstration sites (74.5%) ($\times^2$=17.4, p<.01). Urban clients were also more likely to be able to feed themselves independently (80.5%) than rural clients (68.0%) ($\times^2$=17.1, p<.01). Men (29.1%) were more likely to require assistance or total care in feeding than were women (15.4%) ($\times^2$=14.9, p<.01). Finally, age was not significantly related to independence in eating.

Figure 5.17. Independence in Eating by Model of Care

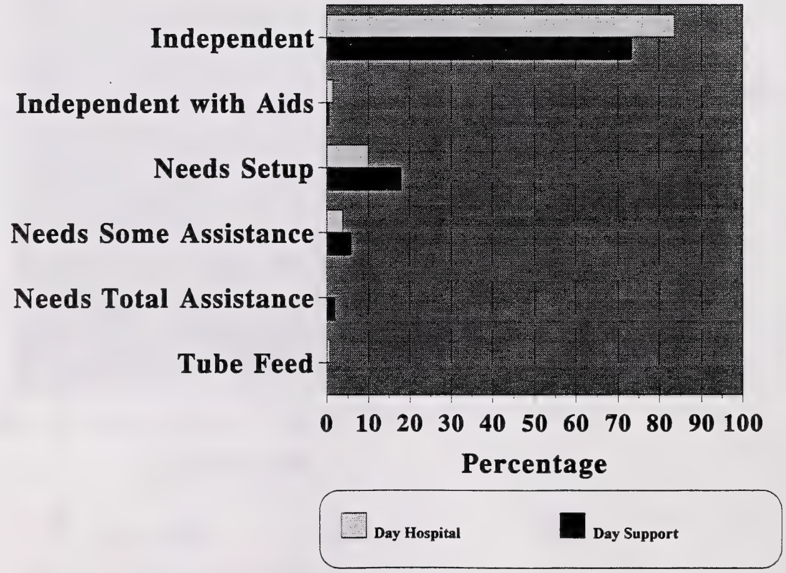


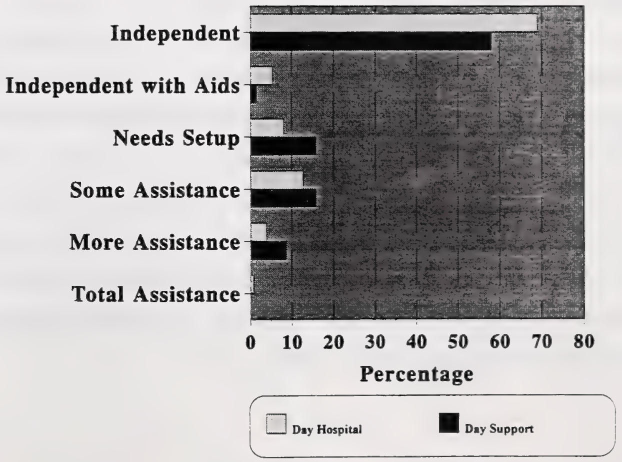
Table 5.12 Independence in Dresssing by Age Group

	<50	50-64	65-74	75-84	85 or Older
Independent	11 (47.8%)	25 (49.0%)	111 (74.0%)	136 (61.6%)	45 (61.6%)
Independent with Aids	0 (0.0%)	2 (3.9%)	3 (2.0%)	7 (3.2%)	6 (8.2%)
Needs Setup Assist	4 (17.4%)	9 (17.6%)	10 (6.7%)	30 (13.5%)	10 (13.7%)
Needs Some Assist	5 (21.7%)	7 (13.7%)	18 (12.0%)	37 (16.7%)	8 (11.0%)
Needs Assist of One	3 (13.0%)	8 (15.7%)	8 (5.3%)	11 (5.0%)	3 (4.1)
Needs Assist of Two	0 (0.0%)	0 (0.0%)	0 (0.00%)	1 (0.5%)	1 (1.4%)

Independence in Dressing

Most (66.8%) were able to get dressed independently (see Figure 5.18). Those who could manage with some assistance to get dressed, such as selecting and laying out clothes to wear, totalled 12.1%. A further 14.4% required some supervision/assistance, and 6.7% required the constant assistance/supervision of one or more persons. Again, those in adult day support programs were more likely to require assistance in dressing than those in adult day hospital programs ($\times^2=22.6$, $p<.01$). More clients in comparison sites (67.0%) could dress themselves independently than in demonstration sites (54.4%) ($\times^2=12.0$, $p<.05$). There were no significant rural/urban differences on this variable. Men (43.3%) were more likely than women (26.8%) to require assistance or total care in dressing ($\times^2=15.6$, $p<.01$). Those in the youngest age group were less independent than those in the older age groups, again reflecting the severity of disability in the youngest age group ($\times^2=33.7$, $p<.05$) (see Table 5.12).

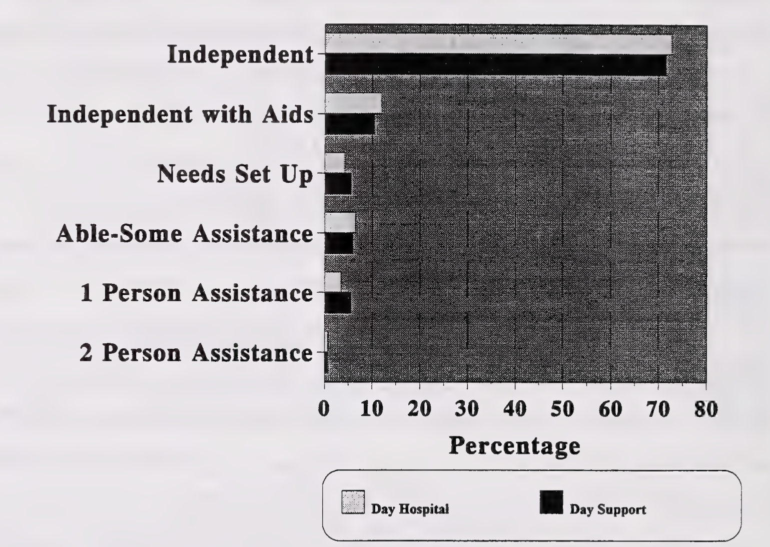
Figure 5.18. Independence in Dressing by Model of Care



Independence in Toileting

Most (83.4%) adult day program clients were able to manage toileting independently (see Figure 5.19). Those who required someone to assist them in preparing to go to the bathroom accounted for 5.0%, those needing some assistance/supervision totalled 6.3%, and those requiring the assistance/ supervision of one or more persons comprised 5.3%. There was no difference between the day hospital and support groups on this variable. Again comparison site clients (74.8%) were more independent in toileting than demonstration site clients (65.1%) ($\times^2$=18.2, p<.01). Rural clients required assistance more often in toileting than did urban clients (36.0% compared to 26.0%) ($\times^2$=12.9, p<.05). There were no gender or age differences for this variable.

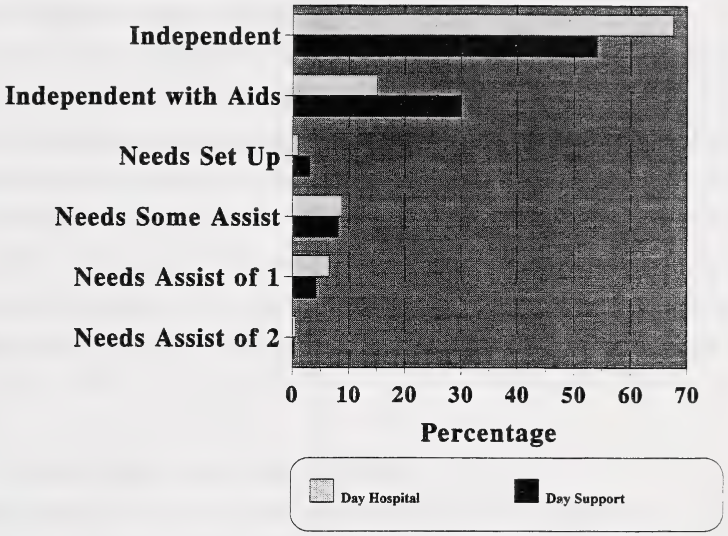
Figure 5.19. Independence in Toileting by Model of Care



Ability to Transfer

About 61.1% of adult day program clients required no assistance to transfer themselves from one position to another (see Figure 5.20). An additional 22.3% could manage independently with proper equipment. Those able to manage independently if preparations had been made totalled 2.1%, 8.5% required some supervision/assistance, and 6.1% required the constant supervision/ assistance of another person. There was a significant difference between day hospital and day support clients on this variable, with day hospital patients having a higher proportion of individuals who were independent with equipment and able to manage if advance preparations had been made and a lower proportion of individuals who were independent without equipment, and who managed with some supervision/assistance ($\times^2$=21.3, p<.01).

Figure 5.20. Ability to Transfer by Model of Care



At demonstration sites, 66.0% of clients transferred themselves independently without using any aids, compared to 59.1% of clients at comparison sites. More comparison clients transferred independently with aids than at demonstration sites (25.3% versus 14.7%) ($\times^2=21.8$, $p<.01$). More rural clients (43.0%) required assistance to transfer than urban clients (38.0%) ($\times^2=13.0$, $p<.05$). As with toileting, those in the under 50 age group were less likely to be able to manage transferring independently than those in the other age categories and were more likely to require total care ($\times^2=53.8$, $p<.01$) (see Table 5.13). Again, this reflects the serious health problems noted earlier in the younger age groups. There were no gender differences on this variable.

Table 5.13 Ability to Transfer by Age Group

	<50	50-64	65-74	75-84	85 or Older
Independent	12 (52.2%)	35 (67.3%)	112 (74.2%)	122 (54.2%)	39 (52.0%)
Independent with Aids	3 (13.0%)	4 (7.7%)	24 (15.9%)	61 (27.1%)	26 (34.7%)
Needs Setup Assist	1 (4.3%)	2 (3.8%)	1 (0.7%)	5 (2.2%)	2 (2.7%)
Nees Some Assist	1 (4.3%)	7 (13.5%)	7 (4.6%)	23 (10.2%)	7 (9.3%)
Needs Assist of One	5 (21.7%)	4 (7.7%)	7 (4.6%)	12 (5.3%)	1 (1.3%)
Needs Assist of Two	1 (4.3%)	0 (0.0%)	0 (0.0%)	2 (0.9%)	0 (0.0%)

Health Care Utilization

Days in Acute Care

The average number of days spent in acute care facilities during the preceding year by day program clients (n=475) was 20.1, and ranged from 0 to 365. Adult day support clients averaged 13.1 days in acute care facilities during the previous 12 months, while those in adult day hospitals averaged 26.7 days, a difference which was statistically significant (t=-3.79, p=<.01). The number of days spent in acute care averaged 19.9 for demonstration site clients and 20.1 for comparison sites, a non-significant difference. Rural clients spent on average 21.6 days in acute care in the last year compared to urban clients who averaged 19.7 days. This difference was not significant. There was no difference in the number of days in acute care reported by men (21.8) and women (19.0) or in the number of days in acute care reported by the different age groups.

Days in Long Term Care Facilities

On average, adult day program clients (n=490) had spent 8.1 days in a long term care facility during the previous year. Adult day support clients averaged 9.7 days in long term care facilities during the previous 12 months, while the figure for those in adult day hospitals was 6.7 days. This difference was not statistically significant. Those in demonstration sites averaged 20.5 days in long term care facilities, while those in comparison sites averaged 2.9 days, a significant difference (t=4.24, p<.01). Urban clients who averaged 5.3 days in long term care facilities had spent significantly fewer days than clients in rural settings who averaged 19.3 days (t=-2.94, p<.01). There was no significant difference between men and women in the number of days reported in long term care facilities or in the number of days in long term care facilities reported for the different age groups.

Number of Physician Visits

Adult day program clients reported making, on average, 7.5 visits to a physician in the past 12 months. Those in adult day support programs reported seeing their physicians, on average, 7.2 times during the past year. Adult day hospital clients indicated that they had seen their physicians, on average, 7.8 times in the past year, not a statistically significant difference. The number of physician visits made by rural clients averaged 8.6 compared to 7.2 by urban clients. This difference was not significant. Similarly, the number of physician visits made by comparison clients averaged 7.0 compared to 8.9 by demonstration clients. This difference was significant (t=2.13, p<.05). The difference in the number of physician visits reported by men and women was not statistically significant. However, the 65 to 74 year old age group reported significantly more physician visits (8.7) than the 85 and over age group (4.9) (F=2.99, p<.05).

Utilization of Community Services

Most (85.5%) adult day program clients reported utilizing some type of community support. In day support programs 88.8% of clients reported utilizing some form of community support. This was significantly higher than the 81.9% of clients in day hospitals who reported using some form of community support ($\times^2=5.4$, $p<.05$). There was no significant difference in the pattern of utilization between those in demonstration sites and those in comparison sites. In rural areas, clients were significantly less likely to report utilizing community support, 78.2% compared to 87.1%, than their urban counterparts ($\times^2=5.28$, $p<.05$). There were no significant differences between the probability of clients utilizing community support and either their gender or age.

A summary of the types of services being utilized by clients is provided in Table 5.14. In Tables 5.15 to 5.17 the services utilized by clients have been broken down by model of care, geographical location, and program type. As can be seen in Table 5.15, day support clients were more likely to be receiving nursing services through Home Care, while day hospital clients were more likely to be utilizing Alberta Mental Health services, psychologists or psychiatrists, Meals on Wheels, handymen, Home Care homemakers, and other services through Home Care. The other category of Home Care services was predominantly personal care aides to provide assistance with bathing. The increased likelihood of day hospital clients to be living alone and in poorer physical health explains the greater use of Meals on Wheels, homemakers, handymen, and other Home Care services. As nursing services are limited or absent at most day support programs, it follows that adult day support program clients would be more likely to require nursing services in the home.

Table 5.14 Utilization of Community Services

Type of Service	Percent of Clients
Homecare (All Services)	35.9%
Homecare Handyman	0.5%
Homecare Homemaker	25.3%
Homecare Nurse	25.1%
Homecare Other	15.7%
Alberta Mental Health	4.2%
Handyman	2.1%
Homemaker	7.1%
Lifeline	6.7%
Meals on Wheels	7.2%
Occupational Therapy	1.2%
Physical Therapy	3.7%
Podiatrist	7.6%
Psychologist/Psychiatrist	6.5%
Social Services	1.6%
Victorian Order of Nurses	3.5%
Total Receiving Community Support	**85.5%**

As noted in Table 5.16, clients in demonstration programs were more likely to be utilizing community physiotherapy and occupational therapy services, social services, psychologists or psychiatrists, homemakers, Home Care nurses, and all Home Care services than clients in comparison programs, while comparison program clients were more likely to be receiving other Home Care services. Rural clients were more likely than urban clients to be utilizing Home Care nurses and social services (see Table 5.17). Conversely, urban clients were more likely than rural clients to be utilizing the services of a podiatrist, VON, or other Home Care services. The range of community services is larger in urban areas and clients at urban programs are likely to have greater access to a wider spectrum of services than their rural counterparts.

Table 5.15 Utilization of Community Services by Model of Care

Type of Service	Day Hospital	Day Support	Chi Square	Significance
Homecare (All Services)	42.4%	29.8%	9.75	**p<.01
Homecare Handyman	7.0%	3.0%	0.43	p=.50
Homecare Homemaker	30.3%	20.7%	6.90	**p<.01
Homecare Nurse	17.0%	32.5%	18.20	**p<.01
Homecare Other	19.6%	12.2%	5.76	*p<.05
Alberta Mental Health	7.0%	1.7%	9.83	**p<.01
Handyman	3.7%	0.7%	6.20	*p<.05
Homemaker	8.9%	5.4%	2.53	p=.11
Lifeline	7.7%	5.8%	0.89	p=.35
Meals on Wheels	10.3%	4.4%	7.40	**p<.01
Occupational Therapy	0.7%	1.7%	1.06	p=.30
Physical Therapy	4.1%	3.4%	0.18	p=.67
Podiatrist	8.9%	6.4%	1.17	p=.28
Psychologist/Psychiatrist	11.1%	2.4%	17.50	**p<.01
Social Services	0.7%	1.7%	2.41	p=.12
Victorian Order of Nurses	4.8%	2.4%	2.44	p=.12
Total	**81.9%**	**88.8%**	**5.40**	***p<0.05**

When one considers that many of the clients in this vulnerable population were living in their own homes, the number of individuals receiving the services of a handyman seems remarkably low. The safety and health of clients is at risk if routine repairs and maintenance of items such as broken steps and drafty windows are not carried out. As well, if activities such as removing snow in the winter does not take place, this presents a serious hazard for this vulnerable population. More women (29.9%) than men (17.7%) were receiving the services of a homemaker ($\times^2=10.6$, $p<.01$), undoubtedly because men were more likely to be married and had wives to carry out homemaking duties. Considering the age and relative frailty of many of these women, they may be at risk for further health deterioration given their extra caregiving duties without receiving support in the home.

Table 5.16 Utilization of Community Services by Program Type

Type of Service	Demonstration Sites	Comparison Sites	Chi Square	Significance
Homecare (All Services)	45.6%	32.4%	8.40	**p<.01
Homecare Handyman	0.7%	0.5%	0.08	p=.78
Homecare Homemaker	20.1%	27.1%	2.82	p=.09
Homecare Nurse	42.3%	18.9%	31.81	**p<.01
Homecare Other	8.7%	18.2%	7.48	**p<.01
Alberta Mental Health	3.4%	4.6%	0.39	p=.53
Handyman	2.0%	2.2%	0.01	p=.91
Homemaker	12.8%	5.0%	10.00	**p<.01
Lifeline	5.4%	7.2%	0.58	p=.44
Meals on Wheels	5.4%	7.9%	1.06	p=.30
Occupational Therapy	3.4%	0.5%	7.43	**p<.01
Physical Therapy	6.7%	2.6%	5.10	*p<.05
Podiatrist	5.4%	8.4%	1.43	p=.23
Psychologist/Psychiatrist	16.1%	3.1%	30.32	**p<.01
Social Services	3.4%	1.0%	4.00	**p<.05
Victorian Order of Nurses	5.4%	7.9%	2.00	p=.16
Total	**87.2%**	**84.9%**	**0.49**	**p=.48**

Table 5.17 Utilization of Community Serivces by Geographical Location

Type of Service	Rural Sites	Urban Sites	Chi Square	Significance
Homecare (All Services)	33.1%	48.5%	8.55	**p<.01
Homecare Handyman	0.6%	0.0%	0.66	p=.42
Homecare Homemaker	26.7%	18.8%	2.71	p=.10
Homecare Nurse	19.4%	51.5%	45.60	**p<.01
Homecare Other	17.6%	6.9%	7.18	**p<.01
Alberta Mental Health	4.3%	4.0%	0.02	p=.88
Handyman	2.6%	0.0%	2.66	p=.10
Homemaker	7.3%	5.9%	0.24	p=.63
Lifeline	7.3%	4.0%	1.49	p=.22
Meals on Wheels	7.7%	5.0%	1.00	p=.33
Occupational Therapy	0.9%	3.0%	3.02	p=.08
Physical Therapy	3.0%	6.9%	3.57	p=.06
Podiatrist	8.6%	3.0%	3.75	*p=.05
Psychologist/Psychiatrist	6.5%	6.9%	0.03	p=.86
Social Services	0.6%	5.9%	14.87	**p<.01
Victorian Order of Nurses	4.3%	0.0%	4.50	*p<.01
Total	**78.2%**	**87.1%**	**5.28**	**p<.05**

Caregiver Information

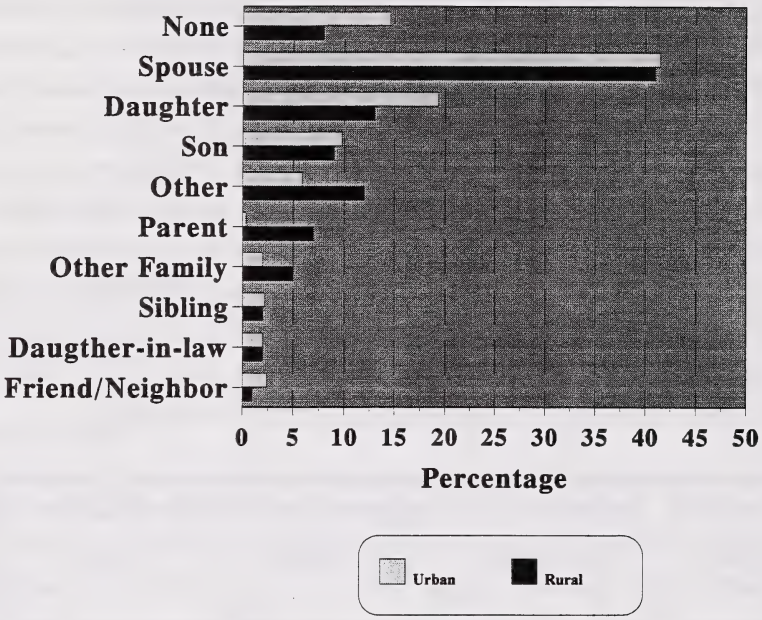
Primary Informal Caregiver

Most clients (86.6%) in adult day programs indicated that they had a caregiver (see Table 5.18). Spouses were the reported caregiver in 41.4% of cases, daughters in 18.2%, and sons in 9.6%. Daughters-in-law, siblings, parents, other family members, friends, and neighbours were each reported less than 3% of the time. Clients attending adult day support programs were significantly more likely to have a caregiver than those in day hospital programs ($\times^2$=21.0, p<.05). This reflects the findings that day support clients were less likely to be living alone and more likely to have cognitive impairments. Compared to those in adult day hospitals, there were larger numbers of daughters-in-law and parents who were caregivers in the adult day support group. More urban than rural clients reported not having an informal caregiver (see Figure 5.21). In urban settings daughters were more frequently caregivers than their rural counterparts ($\times^2$=34.8, p<.01). There were no differences on this variable by program type (comparison versus demonstration).

Table 5.18 Informal Caregivers by Model of Care

Caregiver	Day Hospital	Day Support	Total
None	44 (16.3%)	31 (10.7%)	75 (13.4%)
Spouse	105 (38.9%)	127 (43.8%)	232 (41.4%)
Daughter	57 (21.1%)	45 (15.5%)	102 (18.2%)
Son	29 (10.7%)	25 (8.6%)	54 (9.6%)
Daughter-in-law	1 (0.4%)	10 (3.4%)	11 (2.0%)
Sibling	5 (1.9%)	7 (2.4%)	12 (2.1%)
Parent	1 (0.4%)	8 (2.8%)	9 (1.6%)
Other Family	5 (1.9%)	9 (3.1%)	14 (2.5%)
Friend	5 (1.9%)	6 (2.1%)	11 (2.0%)
Neighbour	0 (0.0%)	1 (0.3%)	1 (0.2%)
Other	18 (6.7%)	21 (7.2%)	39 (7.0%)

Figure 5.21. Informal Caregivers by Geographical Location



There were insufficient numbers to test the differences in relationship to caregiver across age groups. However the trend was for older clients to report more often that their primary informal caregiver was one of their children or the spouse of a child. Conversely, those who were under 50 were more likely to have a family member other than a spouse or child as a caregiver than those in other age categories. More women (16.6%) compared to men (8.3%) reported that they had no informal caregiver. A spouse was the primary informal caregiver for men in 67.1% of cases, but for women in only 25.3%. A child or child's spouse was more often reported as the primary informal caregiver for women (41.9%) than men (10.6%). These differences were statistically significant ($\times^2$=106.8, p<.01) and would seem to reflect gender-biased views of society favouring care provided to family members by women rather than men.

Health Status of Caregiver

The caregivers of adult day program clients were considered to be frail by the individual who completed the questionnaire in 13.2% of all cases, and there were no differences here by model of care, geographical location or program type. However, male clients (18.4%) were almost twice as likely to report having a frail caregiver than female clients (9.8%) ($\times^2$=7.6, p<.01). It was reported that caregivers had some type of health problem in 32.1% of cases. Caregivers of men (40.3%) were significantly more likely to have health problems than were those of women (26.6%) ($\times^2$=10.1, p<.01). These findings suggest once again that the greater likelihood of elderly men to have a marital partner provides the advantage of having a spousal caregiver, despite the fact that this caregiver is herself often elderly and frail.

Social Support

Frequency of Phone Contact with Family Members

Most clients (64.0%) in adult day programs spoke on the telephone with family members at least weekly, with 23.3% communicating on a daily basis (see Table 5.19). Phone calls with family members took place monthly or twice monthly for 21.3% of clients. The remaining 14.7% spoke less frequently or not at all with other family members on the phone. Clients in adult day hospital programs were almost twice as likely to communicate with family members by phone on a daily basis than those in adult day support programs, and were somewhat more likely to call at least weekly ($\times^2$=21.3, p<.01). Those in comparison sites were more likely to be in daily contact than those in demonstration sites ($\times^2$=16.4, p<.01). Those in urban sites were more likely to be in touch daily than in rural sites ($\times^2$=10.3, p<.05). Women reported more frequent telephone contact than their male counterparts, with larger numbers of women reporting daily contact, and fewer reporting monthly contact ($\times^2$=13.4, p<.01). Age was not significantly related to frequency of phone contact. Once again these findings demonstrate that the frail elderly do have considerable contact with their families contrary to the widely held stereotype that they have been abandoned by their families.

Table 5.19 Telephone Contact With Family Members

	Daily	Weekly	Twice Monthly	Monthly	Other
Day Hospital	28.8	43.5	10.4	6.5	10.8
Day Support	16.6	37.3	13.4	13.4	19.4
Demonstration	15.4	38.3	13.4	10.1	22.8
Comparison	26.8	41.8	11	9.5	11
Rural	13.1	42.4	18.2	11.1	15.2
Urban	25.9	40.2	10.1	9.3	14.6
Total	23.3	40.7	11.7	9.6	14.7

Frequency of Face-to-Face Contact with Family Members

Most (55.4%) adult day program clients had face-to-face contact with another family member other than those living with them at least weekly. Those in adult day support programs were more likely than those in day hospital programs to have infrequent contact (15.8% versus 28.4%) ($\times^2$=13.2, p<.01). There were no significant differences by geographical location or program type on frequency of face-to-face contact. Neither were there any gender or age differences noted for this variable. These results may reflect a number of differences between clients in the two major day program groups. One such difference may be the predominance of physical illness in the day hospital group among cognitively intact clients and the greater relative number of clients with cognitive impairment in the day support group.

Recent Death of Family Member or Friend of Client

A recent death of a close family member or friend of the client was reported in 18.4% of cases. There was no significant difference in the number of recent deaths between those in adult day support and day hospital programs. Spouses accounted for 22.2% of reported deaths, children for 7.1%, parents for 8.1%, siblings for 12.1%, friends for 24.2%, and other relatives for 26.3%. This pattern was similar for clients in both types of day programs. Adult day support clients reported that, on average, it had been 6.9 months since their friend or relative had passed away. Adult day hospital clients reported that, on average, the death referred to had occurred 9.7 months previously, a difference which was statistically significant (t=-2.43, p<.01). There were no urban/rural or comparison/demonstration site differences in the likelihood of the client having a recent death in the family. No differences were noted between this variable and gender or age. The deceased person had lived with the client in 20.2% of cases. Although there were a larger number of clients who reported having lived with the deceased person in the adult day hospital group, this difference was not statistically different. There were no rural/urban or comparison/demonstration site differences on this variable. Whether or not the deceased person lived with the client was not related to age or gender.

Chronic or Terminal Illness of Family Member Living with Client

It was reported that 19.2% of clients were living with a family member with a chronic illness. Only 1.7% reported that a family member who was living with them had a terminal illness. Again no differences between adult day support clients and adult day hospital clients were noted on either of these variables. Slightly more clients (25.3%) in demonstration programs reported living with a family member with a chronic illness than in comparison sites (17.0%) ($\times^{2}$=4.8, p<.05). There were no rural/urban differences in the likelihood of living with a family member with a chronic illness. The likelihood of living with a family member with a terminal illness did not vary across rural/urban or comparison/demonstration sites. The only gender difference was that male clients (24.5%) were more likely to live with someone with a chronic illness than women (15.8%) ($\times^{2}$=6.3, p<.01). The likelihood of living with a family member with a chronic or terminal illness did not differ across age groups.

Handicapped Dependants of Clients

A small number (3.1%) of adult day program clients reported having a handicapped dependant, but there were no significant differences on this variable by model of care, geographical location or program type, nor was there a difference by gender or age.

Adult Day Program Information

Days in Program

The average number of days a client attended an adult day program was 1.8 per week and ranged from one to five. Adult day support program clients spent an average of 1.7 days per week at the program, while adult day hospital clients averaged 2.0 days per week, a statistically significant difference (t=-4.16, p<.01). There was no difference in the number of days clients in comparison and demonstration sites attended. However those in rural programs averaged 2.2 days compared to urban clients who averaged 1.8, a significant difference (t=-5.38, p<.01). There were no statistical differences between the number of days that men and women spent in the program, and none between age and number of days spent in a program.

Hours in Program

The number of hours clients in adult day programs attend weekly averaged 10.4 and ranged from two to 32. In adult day support programs, clients spent an average of 10.8 hours at the program weekly, while adult day hospital clients attended for 10.3 hours, a difference which was not significant. At comparison sites clients averaged 10.7 hours weekly compared to 9.6 at demonstration sties, a significant difference (t=-3.05, p<.01). Clients at rural sites attended more hours per week than clients at urban sites, 11.2 and 10.3 respectively, also a significant difference (t=-2.13, p<.05). No differences between the number of hours that men and women spent in the program each week were apparent, nor was there any relationship between age and number of hours spent in a program.

Anticipated Length of Stay in Program

The average anticipated length of stay for adult day program clients was 10.4 months and ranged from zero to 96 months. Length of stay was divided into five sections, those whose anticipated length of stay was 0 to 3 months, 4 to 6 months, 7 to 12 months, over 12 months, and indefinite. In adult day support programs, the anticipated length of stay of clients was reported as indefinite or ongoing on 254 (87.9%) occasions. In adult day hospital programs, anticipated length of stay was reported as indefinite or ongoing only 26 (9.9%) times. Over 60 per cent of clients in day hospital programs were expected to be in the program for less than six months. However, in the day support group only 3.4% were expected to be there less than six months. The pattern of length of stay was significantly different between the day hospital and day support groups ($\times^2$=346, p<.01), and likely reflects the differing purposes of day hospital and day support programs, with day hospital programs concentrating on providing a short-term comprehensive assessment and treatment rather than long term social support and follow up. Clients whose length of stay was reported as indefinite were not included in the following comparison of length of stay by model of care, program type, and geographic location and selected demographic variables. As might be expected, adult day support program clients were expected to continue in the program for a considerably longer period of time (14.9 months) than those in adult day hospital programs (9.2 months) (t=2.84, p<.01). There were no significant differences in anticipated length of stay by geographical location or program type. No differences in the expected length of stay for men and women were noted. Those under 50 (23.4 months) were expected to stay significantly longer than those between 65 and 74 (8.8 months), those between 75 and 84 (8.7 months), and those 85 and over (8.2 months) (F=6.6, p<.01).

Acute Care and Long Term Care Facility Admissions

During the three month period of time when data on individual clients was collected, information on the admissions of clients to long term care and acute care facilities was collected. As this section is based on the small number of 14 programs, no tests for significant differences have been applied. The average number of admissions in total during this three month time period was 8.5 per program, and ranged from two to 20. The average number of admissions to an acute care facility was 5.8, and to a long term care facility was 2.7. The total number of admissions from day hospitals was 8.8, compared to slightly fewer from day support programs at 8.4. Day hospitals reported more admissions to acute care, averaging 8.0, than did day support programs which averaged 4.8. Admissions to long term care facilities were higher in day support programs which averaged 3.6 admissions, than in day hospital programs which averaged 0.8.

The total number of admissions averaged 12.4 at comparison sites, which was higher than the average of 5.7 at demonstration sites. The numbers admitted to acute care at comparison sites averaged 8.2, double that of demonstration sites which averaged 4.1 admissions. Admissions to long term care facilities were 1.6 at demonstration sites and 4.2 at comparison sites. The total number of admissions to rural programs was 9.8, compared to 7.8 in urban programs. The number of admissions to acute care was similar between urban and rural programs, averaging 5.9 and 5.8 respectively. However, the number of admissions to long term care facilities at rural sites was higher, averaging 4.0, than at urban sites which averaged 1.7.

Of the 32 admissions to long term care facilities, 75.0% were for respite purposes, and 25.0% were for permanent placement. There were a number of reasons for the 70 admissions to acute care. A cerebral vascular accident was the most frequent reason for admission, followed by depression, weakness, falls, decubitus ulcers, and electrolyte imbalances. A summary of the reasons for admission to acute care by diagnostic categories are reported in Table 5.20.

Table 5.20 Reasons for Admissions to Acute Care

Blood Disorders	3 (4.3%)
Circulatory Disorders	6 (8.6%)
Digestive Disorders	4 (5.7%)
Endocrine and Metabolic Disorders	6 (8/6%)
Genitourinary Disorders	1 (1.4%)
Mental Problems	8 (11.4%)
Musculoskeletal Disorders	3 (4.3%)
Neurological Motor Dysfunction	10 (14.3%)
Pulmonary Disorders	2 (2.9%)
Skin Disorders	3 (4.3%)
Other (Weakness, Fall, Investigation, Surgery, Pain, Rehabilitation)	24 (34.3%)

Individual Client Goals

Thirty seven specific goals for individual clients were reported by site staff at the various day support and day hospital programs. Medical assessment and treatment was reported as a goal in 50.0% of cases. The next most frequently reported goal was socialization (39.9%), followed by psychological assessment and treatment (30.1%), management of medications (26.8%), increasing mobility (24.0%), occupational therapy assessment and treatment (23.8%), management of diet (20.1%) and provision of respite (16.6%). The complete listing by model of care is located in Table 5.21. No specific treatment goals were identified for 16.2% of clients.

Table 5.21 Client Goals Reported by Model of Care

Client Goal	Day Hospital (%)	Day Support (%)	Total (%)
Assist in Organizing Finances	0.4	0.0	0.2
Coping Assistance for Caregivers	7.4	0.4	3.9
Decrease Admissions to Hospital	0.0	0.7	0.4
Dental Assessment/Treatment	2.6	0.0	1.3
Energy Conservation	1.8	0.7	1.3
Facilitate Admission to Longterm Care	0.4	0.0	0.2
Facilitate Discharge from Acute Care	0.4	0.4	0.4
Family Assessment/Treatment*	18.0	0.4	9.4
Find Appropriate Living Quarters	7.4	0.4	3.9
Foster Independence	15.8	12.2	14.0
Hearing Assessment/Treatment	4.4	0.0	2.2
Improve Communication Skills	5.1	10.1	7.4
Increase Activity Level	11.8	7.0	9.4
Increase Mobility/Strength*	37.1	11.1	24.0
Increase Self-Esteem	11.8	5.6	8.7
Maintain Hygiene	5.5	4.1	4.8
Maintain Present Health and Functional Status*	1.1	28.9	14.9
Management of Diet*	30.1	10.0	20.1
Management of Incontinence*	12.1	1.1	6.6

Table 5.21 (Continued) Client Goals Reported by Model of Care

Client Goal	Day Hospital (%)	Day Support (%)	Total (%)
Management of Medications*	48.5	4.8	26.8
Management of Stress*	15.8	1.9	8.9
Management of Substance Abuse	4.4	0.4	2.4
Medical Assessment/Treatment*	68.8	30.7	50.0
Occupational Therapy Assessment/Treatment*	42.3	5.2	23.8
Organize Guardianship/Power of Attorney	2.6	0.0	1.3
Physiotherapy Assessment/Treatment	13.6	11.1	12.4
Provide Emotional Support*	11.0	0.7	5.9
Provide Opportunity to Reminisce	0.0	1.5	0.7
Provide Pleasurable Experience	0.0	1.9	0.9
Provide Respite	14.3	19.3	16.6
Psychological Assessment/Treatment*	48.9	11.1	30.1
Reduce Number of Falls	0.4	0.7	0.6
Referral to Other Agencies*	21.0	3.3	12.2
Socialization	36.4	43.3	39.9
Speech Therapy	1.1	0.7	0.9
Support Continued Community Living	2.6	1.5	2.0
Visual Assessment/Treatment	3.3	0.7	2.0
No Goals Listed	3.7	28.5	16.2

*Client goals were identified by program managers or their designate. Goals which showed the most variation between day support and day hospital programs have been identified by an asterick.

Mode of Admission

Most clients (81.1%) were admitted to the program walking, while 19.9% were in wheelchairs, and none were admitted on stretchers. No differences between the adult day hospital and adult day support groups on this variable were noted. In rural programs, 28.0% of clients were admitted in a wheelchair. This was significantly more than the 18.2% of urban clients admitted in wheelchairs ($\times^2=5.0$, $p<.05$). There were no differences in the mode of admission between demonstration and comparison sites. No gender differences were found with mode of admission. Those under 50 were more likely to be in a wheelchair (43.5%) as compared to the other age groups in which the likelihood of being in a wheelchair ranged from 13.9% to 23.9% ($\times^2=11.4$, $p<.05$).

Source of Information at Time of Admission

At the time of admission to a day support program, the source of information about the client was a person other than the client in 75.6% of cases. In day hospitals, the source of information was more likely to be the client, with 52.8% of clients providing information about themselves. More than one source of information was utilized in 57.4% of the cases in adult day support programs and 33.6% of cases in adult day hospital programs. The difference in the pattern of sources of information was statistically significant ($\times^2=47.4$, $p<.01$). At comparison sites, the client was more likely to be the source of information than at demonstration sites (40.2% versus 34.7%) ($\times^2=7.6$, $p<.05$). Similarly, clients at urban sites were also more likely to be the source of information at the time of admission than their rural counterparts, 41.7% and 25.0%, respectively ($\times^2=10.1$, $p<.05$).

Transportation to the Day Program

Transportation to adult day programs was accomplished by private vehicle in 9.3% of cases, by handi-bus or DATS for 55.4% of clients, by taxi in 12.3% of cases, and by some other mode for the remaining 23.0%. Private vehicles and handi-bus or DATS were more often used in adult day support programs, while taxis and alternate modes of transportation were in higher proportion in adult day hospital programs. This difference was statistically significant ($\times^2=70.8$, $p<.01$). Demonstration clients were more likely to come by private vehicles or handi-bus and less likely to come in a taxi or by some other means of transportation than comparison clients ($\times^2=46.1$, $p<.01$). Rural clients were less likely to come to the program in a handi-bus or taxi than were urban clients ($\times^2=49.9$, $p<.01$). Women were more likely than men to come in either a private vehicle or taxi, while men were more likely to come in a handi-bus ($\times^2=14.7$. $p<.01$) (see Figure 5.22). Transportation to day programs differed across age groups with younger clients more likely to come via handi-bus ($\times^2=30.6$, $p<.01$) (see Table 5.22).

Figure 5.22. Mode of Transportation by Gender

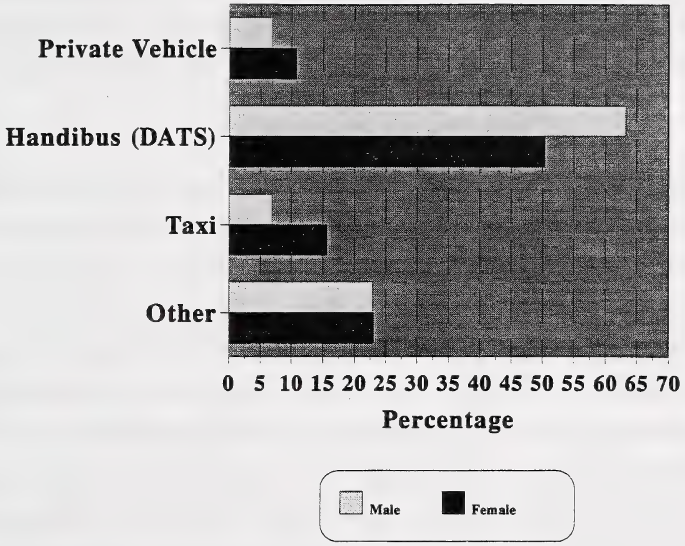


Table 5.22 Transportation by Age Group (Percentage)

Mode	<50	50-64	65-74	75-84	85 or Older
Private Vehicle	13.0	11.9	9.4	7.6	11.4
Handibus DATS	65.2	68.7	51.3	55.3	49.4
Taxi	4.3	1.5	20.0	13.5	5.1
Other	17.4	17.9	19.4	23.6	34.2

The cost of transportation was paid for by the program in 37.7% of cases, by the client or family in 53.8% of cases, or by someone else or through a combination of sources in 8.0% of situations. Three individuals were able to walk to the day program from their homes. In the day support program, clients or their families were more likely to have to pay for transportation than in day hospital programs. This difference was statistically significant ($\times^2=80.5$, $p<01$). At comparison sites, transportation was paid by the program for 48.8% of clients compared to 6.7% at demonstration sites. Clients or their families absorbed the transportation costs for 79.9% of clients at demonstration sites, compared to 44.4% at comparison sites. These differences were statistically significant ($\times^2$=88.4, p<.01). At urban programs, transportation costs were paid in 41.9% of cases compared to only 17.3% of cases at rural programs, another significant difference ($\times^2$=103.7, p<.01).

Those who were 65 and over (42.4%) were more likely to have their transportation paid by the program than were those in the under 65 age group (10.2%). For those under 65, clients or their families were more likely to pay for their transportation ($\times^2$=67.9, p<.01). Women (41.0%) were also more likely to have their transportation paid for by the program than men (32.3%). Clients or their families assumed the cost for 60.3% of men and 49.9% of women. These differences were statistically significant ($\times^2$=5.8, p<.05). The critical importance of transportation was raised often by clients, caregivers, program staff, and referral agency managers in this study. Access to programs is often determined on the basis of the availability of suitable transportation arrangements. The cost of such transportation is an issue of considerable importance and the willingness and ability to pay for this service by clients and families clearly serve as deterrents to accessing day program services by those who could benefit from their services.

Referrals to Program

Referrals to day programs came most often from physicians, Home Care, family or spouses, acute care hospitals, or from other day programs. The remainder came from other sources such as self, neighbour/friend, community nurse, and nursing home/auxiliary hospital. In Table 5.23, referral patterns by model of care, geographical location and program type are compared. There were insufficient numbers to test for differences in referral patterns by program type, model of care or geographical location. However, several trends were evident. In day hospitals, referrals were higher from physicians and acute care facilities than in day support programs, while Home Care referrals were higher in day support. Given the medical focus of treatment in day hospitals, these results are not surprising. In rural programs, families or spouses made more referrals than in urban sites. Conversely more referrals were made by physicians in urban sites compared to rural sites. Physicians and spouses or families made more referrals at demonstration sites than comparison sites.

Table 5.23 Referrals by Model of Care, Program Type, and Geographical Location							
	Model of Care		Program Type		Geographical Location		Total
Referral Source	**Day Hospital**	**Day Support**	**Demonstration Sites**	**Comparison Sites**	**Rural Sites**	**Urban Sites**	
Acute Care Hospitals	13.2	8.0	8.1	11.8	12.0	10.4	10.7
Alberta Hospital	0.4	0.4	0.0	0.5	1.0	0.2	0.4
Auxillary Hospital	0.0	2.0	3.4	0.0	4.0	0.2	1.0
Community Nurse	1.8	2.0	2.0	1.9	3.0	1.7	1.9
Home Care	12.9	31.9	18.8	23.3	27.0	20.8	22.0
Neighbour/Friend	0.0	0.8	0.0	0.5	0.0	0.5	0.4
Nursing Homes	0.4	0.8	2.0	0.0	2.0	0.2	0.6
Other Day Program	5.9	10.4	2.0	10.4	0.0	9.9	8.0
Physician	41.5	12.7	36.2	24.3	18.0	30.0	27.5
Self	0.7	2.8	2.0	1.6	3.0	1.4	1.7
Spouse/Family	6.3	19.9	18.1	10.7	22.0	10.6	12.8
Other	16.9	8.4	7.4	15.0	8.0	13.9	13.0

Program Objectives

Site staff were asked to indicate which of eight specified objectives of adult day programs were applicable to each client (see Table 5.24). The goal of supporting the community living of the client was identified most frequently, followed by the objective of delaying institutionalization, and provision of ongoing treatment. Providing services to complement Home Care, respite for caregivers, short term treatment, and conducting comprehensive medical assessments were all frequently reported. The objective of facilitating discharge from hospital was reported in a smaller number of cases. The objectives of supporting continued community living and delaying institutionalization were the only objectives which did not significantly differ in proportion between the day hospital and day support groups. Day hospitals more often reported facilitating discharges from hospital, conducting comprehensive medical assessments, and providing short term treatment as objectives. In day support programs, providing respite, providing ongoing treatment, and providing services to complement Home Care were more often reported as objectives (see Table 5.24). In Table 5.25 the objectives by geographical location are identified, while in Table 5.26 a similar comparison is made by program type.

Table 5.24 Program Objectives by Model of Care

Objective	Day Hospital	Day Support	Chi Square	Significance	Total
Complement Home Care Services	53.7	73.1	22.80	**p<.01	63.9
Conduct Medical Assessment	81.7	7.1	321.30	**p<.01	42.5
Delay Institutionalization	76.5	78.8	0.43	p=.51	77.0
Facilitate Discharge	22.8	5.7	34.40	**p<.01	13.8
Ongoing Treatment	53.7	98.0	155.70	**p<.01	77.0
Respite	40.7	78.1	82.50	**p<.01	60.4
Short Term Treatment	61.2	49.2	8.20	**p<.01	54.9
Support Community Living	94.0	97.0	2.88	p=.09	95.6

Table 5.25 Program Objectives by Geographical Location

Objective	Rural Sites	Urban Sites	Chi Square	Significance
Complement Home Care Services	52.0	66.5	7.45	**p<.01
Conduct Medical Assessment	21.0	47.1	22.94	**p<.01
Delay Institutionalization	76.0	78.1	0.20	p=.65
Facilitate Discharge	17.0	13.1	1.04	p=.31
Ongoing Treatment	94.0	73.3	19.84	**p<.01
Respite	48.0	63.0	7.75	**p<.01
Short Term Treatment	14.0	63.7	81.95	**p<.01
Support Community Living	91.0	96.6	6.01	*p<.05

Table 5.26 Program Objectives by Program Type

Objective	Demonstration Sites	Comparison Sites	Chi Square	Significance
Complement Home Care Services	38.0	73.3	59.35	**p<.01
Conduct Medical Assessment	42.7	42.4	0.00	p=.96
Delay Institutionalization	45.3	89.4	123.50	**p<.01
Facilitate Discharge	11.3	14.7	1.05	**p<.01
Ongoing Treatment	89.3	72.5	17.56	**p<.01
Respite	52.0	63.4	5.96	*p<.05
Short Term Treatment	39.3	60.5	19.90	**p<.01
Support Community Living	87.3	98.6	32.80	**p<.01

SUMMARY

In Table 5.27, a summary of the variation between characteristics of clients in adult day support programs and day hospital programs is provided. In general day hospital clients were more likely to be older, widowed, living alone in urban centres, and were less likely to have a caregiver. They also had higher health care utilization rates as evidenced by the greater number of days spent in an acute care facility in the preceding year, greater number of medications per person, and higher user rates of community services. Program objectives also differed for day hospital and day support clients with those in day hospital programs more likely to require medical assessments, treatment to facilitate early discharge, and short term treatment. In day support programs, the goals more often reported included provision of ongoing treatment, respite, and services to complement Home Care.

Table 5.27 Client Variables Contrasted by Model of Care

Variable	Significant Difference
Gender	--no significant difference
Age*	--day hospital clients averaged 3.5 years older than day support clients
Marital Status*	--a higher proportion of widowed and a lower proportion of never married individuals in day hospital group
Education Level	--no significant difference
Place of Residence*	--a higher proportion of urban residents in day hospital group
Living Situation*	--a higher proportion of individuals living in apartments and fewer in private homes in day hospital group
Living Arrangements*	--a higher proportion of individuals in day hospital group lived alone and smaller proportion lived with family other than their spouse
Occupation*	--a higher proportion of farmers, skilled, semi-skilled and unskilled workers in day support group
Language of Choice	--no significant difference
Legal Decision-Making Status*	--a higher proportion with an appointed decision maker in day support group
Medication Usage*	--on average, day hospital clients reported taking more medication than day support clients
Number of Falls	--no significant difference
Substance Abuse*	--a higher proportion of clients in day hospital group reported a history of substance abuse
Psychiatric Problems*	--a higher proportion of clients in day hospital group reported a history of psychiatric problems
Use of Ambulation Device*	--in adult day hospital group, walkers and wheelchairs were more prevalent; canes or no assistive device less frequent
AAPI Completed*	--a higher proportion of day support clients had a completed AAPI
Days in Acute Care Facilities*	--on average, day hospital clients reported more acute days in last year
Days in Long Term Care Facilities	--no significant difference
Number of Physician Visits	--no significant difference
Community Service Utilization*	--a larger proportion of day hospital clients reported utilizing Home Care, mental health services, private handymen, Meals on Wheels, and psychologist/psychiatrists
Caregiver Present*	--clients in adult day support programs were more likely to have a caregiver.
Phone Contact*	--clients in day hospital programs reported more frequent phone contact with family members
Face-to-Face Contact*	--those in adult day support programs were more likely to have infrequent face-to-face contact
Days in Program*	--day hospital clients averaged 2.0 days per week, significantly more than those in day support programs who averaged 1.7
Hours in Program	--no significant difference
Length of Stay*	--significantly longer length of stay for clients in day support programs
Transportation to Day Program*	--private vehicles and handibus were more often used in adult day support programs, while taxis and alternate modes of transportation were more likely to be used for clients in day hospital programs
Program Objectives*	--day hospital programs reported the following client objectives more frequently than day support programs: conducting medical assessments, facilitating discharge, and short term treatment --day support programs reported the following client objectives more frequently than day hospital programs: complement Home Care, ongoing treatment, respite --no significant difference was noted between the two programs on the objectives of supporting community living and delaying institutionalization

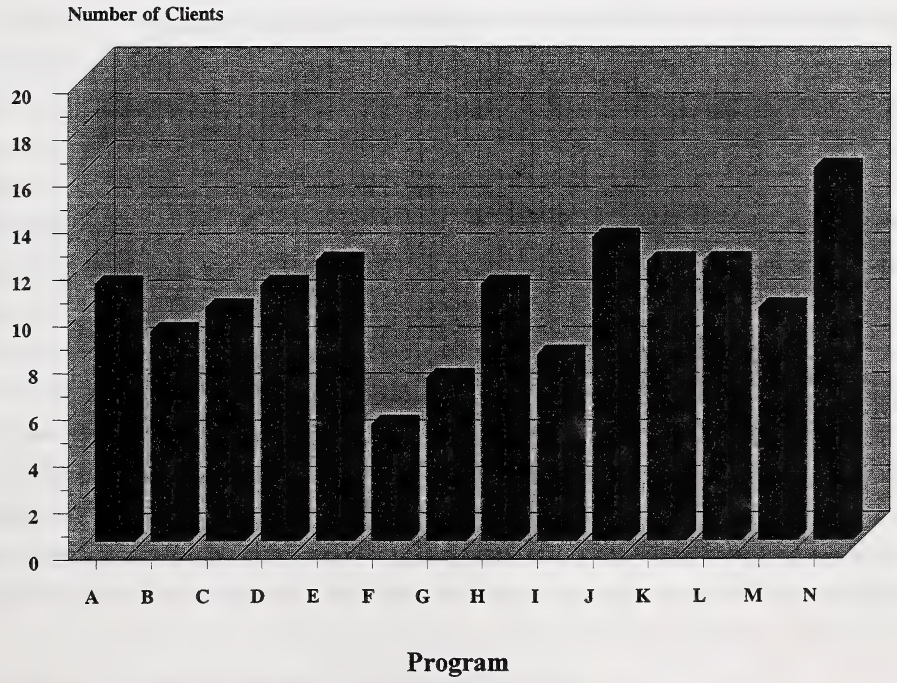
* denotes significant difference

Chapter 6:
Profile of Selected Clients

CHAPTER 6: PROFILE OF SELECTED CLIENTS

Determining the impact of adult day programs on clients was an important purpose in this study. Impact was measured in terms of functional and behavioral status, quality of life, health status, feelings about institutionalization, and general satisfaction with the day program. In Figure 6.1, the number of clients who participated in the study from each program is outlined. In total 147 clients participated. Of these there were 91 clients (61.9%) in day support programs and 56 (38.1%) in day hospital programs, 76 (51.7%) in demonstration projects and 71 (48.3%) in comparison sites, and 60 (40.8%) in rural sites and 87 (59.2%) in urban programs. The number of clients who were cognitively impaired was 51 (34.7%) compared to 96 (65.3%) clients who were cognitively intact. Eighteen clients completed a semi-structured taped interview following the final Time 5 measurement.

Figure 6.1 Number of Clients by Program



Client/caregiver pairs from each of the 14 adult day programs, consisting of five day hospital and nine day support programs, were asked to participate in the study at the time the client was accepted for admission to the program. A sample size of 10 client/caregiver pairs per site was sought. Due to the small number of clients in some programs, it was not possible to attain the desired sample size at all sites. Also, some clients who took part in the study did not have an informal caregiver. Over-sampling at several of the larger programs was used to increase sample size. Program managers or their designates introduced the study to potential clients/caregivers, and telephone follow-up was carried out by data collectors. An appointment was made to discuss the study in further detail and to obtain informed consent. If the client was unable to provide informed consent because of an inability to understand the nature of the request, the informal caregiver was asked to consent on their behalf. In most instances clients were interviewed in their homes, separately from their caregivers. On occasion, clients were interviewed at the program site or another mutually acceptable location.

Interviews were scheduled to take place at five different time intervals, two months before the client entered the program, just before the client entered the program, within two weeks after entering the program, two months following, and six months post entry. Time 1 measurements were only available for those clients/caregivers who were on long waiting lists. Neither Time 1 or Time 2 measurements were available for clients who entered the program on short notice, or in the case of the psychogeriatric population where it was determined by the program directors that an initial assessment of the client's adjustment to the program and suitability for participation in a research study should take place prior to the request to the client to participate in the study. At each time interval, caregivers were also asked to complete a number of instruments. The first instrument administered to the clients was the Canadian adaptation of the Mini-Mental Status Questionnaire. Clients who scored lower than eight out of 10 on this instrument were classified as cognitively impaired; those scoring eight or higher out of 10 were classified as cognitively intact. Those classified as cognitively intact were given one series of instruments, while the caregivers of clients who were cognitively impaired completed a different series of instruments. A purposive sample of representative clients were selected through consultation with day program staff and data collectors and asked to participate in a qualitative interview following the Time 5 measurement. Clients were selected for interview based on their willingness to share their thoughts on tape and to represent the diversity of clients. The qualitative sample contained both male and female clients of varied ages and with differing relationships to the caregivers, as well as those with both positive and negative experiences with day hospital and day support programs.

THE INSTRUMENTS

Instruments Used with All Selected Clients

Client Information Form

The client information form was developed for the purposes of the study (see Appendix C). It incorporated a number of items describing the client including demographic characteristics, utilization of community support services, sources of income, number of days in acute and long term care facilities, number of physician visits, support systems, and services received in the program. In the pilot study, it was found that most of the items showed good reliability ranging from 75 to 100% agreement across the two time measures. There were several items including number of days in acute care and number of physician visits in the last year for which test-retest reliability measures were relatively low. However, correlations between these items were high, suggesting that minor variations in recall on the part of the client may have affected the responses. Also incorporated in the client information form were several questions from the AAPI. As noted earlier, there was little reliability on the question concerning ineffective coping in the pilot study. The client information form was administered on two occasions, at the time of the first interview with a client which may have been Time 1, 2, or 3 and at Time 5. Each of the other instruments was administered at every time interval, with the exception of the Social Relationship Scale which was only administered at Time 5.

Mini-Mental Status Questionnaire

The Mini-Mental Status Questionnaire (MSQ) is a brief and easy to administer tool comprised of 10 items, such as "What is the name of this place?" and "When were you born?" (see Appendix J). A correct answer scores one point. Scores can range from zero to 10 with higher scores representing better mental status. In a large random sample of elderly persons, this instrument was highly correlated with psychiatrists' evaluations of mental status (Kahn, Goldfarb, Pollack, & Peck, 1960). Individuals with scores between eight and 10 are considered to have no, or mild, deficiencies in mental status. The instrument was adapted for use with a Canadian population.

Multi-Dimensional Functional Assessment:
Older Americans' Resource and Services Questionnaire

The section of the Multi-Dimensional Functional Assessment: Older Americans' Resource and Services Questionnaire (OARS) which measures independence in instrumental and physical activities of daily living was used (see Appendix I). The OARS instrument elicits a rating of the individual's ability to perform various tasks on a three-point scale--"without help," "some help," and "completely unable." Scores can range from 14 to 42 for the whole instrument, and from seven to 21 for each of the two subscales, with higher scores representing greater degrees of dependence. Test-retest reliability was reported by the authors to be 0.71 for instrumental and 0.82 for physical activities of daily living (Duke University Center for the Study of Aging, 1978). In this study, the alpha coefficient for reliability was 0.88 for total scores of cognitively impaired clients. For the subscales, the coefficients were 0.78 for the instrumental subscale and 0.90 for the physical subscale. For competent clients, the alpha coefficient for both the instrumental and physical subscales was 0.84, and for the total scale it was 0.89.

Instruments Used Only with Cognitively Impaired Clients

Memory and Behavior Problems Checklist

The Memory and Behavior Problems Checklist asks the respondent to rate the frequency of 30 different behavior and memory problems frequently seen with cognitively impaired individuals of clients such as "trouble remembering recent events," "wandering or getting lost," or "not recognizing familiar people" (see Appendix K). Respondents may also add other behavior or memory problems to the list. The rating scale for each item ranges from zero (this has never been a problem) to five (this happens every day). The higher the score the greater number and frequency of behavior and memory problems. In this study, the alpha coefficient of reliability was 0.90.

Instruments Used Only with Cognitively Intact Clients

Three different instruments were used to tap into the concept of quality of life of clients. These were the Self-Anchoring Striving Scale, the Index of Well Being, and the Quality of Life Index. Correlations between these three scales ranged from 0.44 to 0.64, and all correlations were significant at $p<.01$ providing support for concurrent validity.

Self-Anchoring Striving Scale

The SASS asks subjects to rate their current, past, future, and best quality of life on the rungs of a ladder from zero, indicating the worst possible life imaginable to 10, the best possible life imaginable (see Appendix E). In a large American study of 2,696 individuals, the average score for present quality of life was 6.6 (Cantril, 1965). This scale has been used in at least 13 countries including Canada with adults of all ages. The stability reliability for this measure has been reported as 0.79 (Molzahn, 1989). Stability reliability in this study was examined using the Time 2 and Time 3 measurements, as it would not be expected that quality of life would have changed significantly during this period of time.

Index of Well-Being

The IWB was designed for a national survey examining the quality of American life. It is an 11 item seven-point semantic differential scale (see Appendix F). Ten items are bipolar adjective pairs (such as boring versus interesting; full versus empty) and the last item is a measure of overall satisfaction with life. Based on the recommendations of the developers of this instrument, two of the pairs (easy/hard and tied-down/free) were not included in the calculation of scores. The stability reliability on various items over an eight month period was found to range from 0.42 to 0.67 (Campbell et al., 1976). The alpha coefficient for internal consistency was found to be 0.91 (Molzahn, 1989). Scores can range from 2.1 (a very low level of well-being) to 14.7 (a very high level of well-being). In a large American sample of 2,160 persons, the mean score was 11.8 (Campbell et al., 1976). In this study, the alpha coefficient was 0.92 on the IWB.

Quality of Life Index

This tool has five subscales measuring the impact of health status on activity, daily living, perception of health, support from family and friends, and outlook on life (see Appendix G). Each item is rated from zero to two with higher numbers representing a higher quality of life. An individual's score can range from zero to 10. In a study of 108 chronically ill persons, the average score was 7.3 (Spitzer et al., 1981). Cronbach's alpha for this tool has been reported at 0.78 (Spitzer et al., 1981). In this study, Cronbach's alpha coefficient was a little lower at 0.60.

Health Status

The perceived health status of the client was assessed by asking for a subjective report of current health and that of five years ago on a five point scale ranging from one (excellent health) to five (poor health) (see Appendix H). This method has been used by a number of investigators and has been shown to be a reliable indicator of health status from the individual's perspective (Kerr et al., 1982). As both of these are single item measures, it was not possible to calculate consistency reliability. However, because of the shorter interval between testing times and the long tenure of clients in the pilot day programs, it was possible to calculate stability reliability for the present and previous states of health of clients in the pilot study. These coefficients were 0.86 for present state of health and 0.55 for previous health status.

Feelings about Institutionalization

Opinions regarding institutionalization were requested of clients. Two questions were posed to the client (see Appendix M). The first question asked clients to rate their caregivers' feelings toward institutionalization for the client. The second question asked them to rate their own feelings about institutionalization. For each question, scores could range from one (strongly disapprove) to seven (strongly approve). Questions of this nature have been found to be a reliable measure in other studies where they have been used. Again, because of the shorter interval between testing times and the long tenure of clients in the pilot day programs, it was possible to calculate stability reliability for these items in the pilot study. Clients' own perceptions about institutionalization were very stable (r=0.96) and their perceptions of their caregivers' feelings about institutionalization were a little less stable, but remained reasonably consistent (r=0.77).

Social Support

The Social Relationship Scale developed by McFarlane and colleagues (1981) was used to measure social support (see Appendix N). This tool asks individuals to indicate the number of individuals with whom they would discuss six topics--family, work, finances, health, personal concerns, and societal issues. The relationship of the individual to the client was recorded, and clients were asked to indicate whether or not discussing the issues with each person was helpful or not helpful on a seven-point Likert scale. As such, this scale provides both a quantitative and qualitative measurement of social support. Test-retest reliability for this instrument was reported by McFarlane and colleagues as ranging from 0.62 to 0.99 for the quantitative component (number of individuals in network) and 0.54 to 0.94 for the qualitative component (helpfulness rating). This instrument was added to the study after data collection had commenced and was thus administered only at Time 5. This also precluded the calculation of test-retest statistics.

Satisfaction with Day Program Scale

The Satisfaction with Day Program Scale was administered to both clients and caregivers. This scale consists of seven items measured on a five point scale from very unsatisfied to very satisfied and three open-ended questions (see Appendix D). Six items refer to specific aspects of the program and the seventh item is an overall rating of satisfaction. The last item is weighted heavier than the others in the calculation of total scores. Scores can range from 5.5 to 35.5. In the open-ended questions, clients were asked to describe what they liked best about the program, what they liked least, and if they had any other comments. In the pilot study the stability (test-retest) reliability for clients' responses to the scale items was not calculated because there were too many missing values. The Cronbach's alpha coefficient for the day program satisfaction scale was 0.81 for clients in the pilot study. Clients expressed some difficulty distinguishing between the services provided by nurses, physiotherapists, occupational therapists, and recreational therapists. As a result of this the Satisfaction with Day Program Scale was modified for the larger study by removing the questions which asked clients to rate the services provided by differing disciplines. The alpha reliability coefficient for the larger study utilizing the modified scale was 0.71.

THE ATTRIBUTES OF CLIENTS

Demographic Information

Demographic information was collected for each of the 147 clients who participated in the study at the time of their first interview. In the following section, descriptive information about the clients is reported. As well, differences by model of care (day hospital/day support), geographical location (urban/rural), program type (comparison/demonstration) and selected demographic variables are identified. For the purposes of comparing groups, marital status has been classified into two groups, those who were married and those who were not presently married. Similarly, caregiver status has been collapsed into caregiver present or not present, and living situation has been divided into client lives alone or not alone, unless otherwise specified. Age has been divided into five groups, those who were under 50, those 50 to 64, those 65 to 74, and those 75 or over. A comparison between the 94 clients (63.9%) who completed the study and the 53 (36.1%) who did not is presented.

Gender of Clients

In this sample of 147 clients, there were 76 women (51.7%) and 71 men (48.3%) yielding a relatively balanced sample. The percentage of men and women in this sample who attended day hospital versus day support programs was quite similar (see Table 6.1). There were no significant differences in the proportion of men and women by program type or geographical location.

Table 6.1 Gender by Model of Care, Program Type, and Geographical Location

	Model of Care		Program Type		Geographical Location	
Gender	**Day Hospital**	**Day Support**	**Demonstration Sites**	**Comparison Sites**	**Rural Sites**	**Urban Sites**
Male	26 (46.4%)	45 (49.5%)	33 (43.4%)	38 (43.4%)	28 (46.7%)	32 (53.3%)
Female	30 (53.6%)	46 (50.5%)	43 (56.6%)	33 (46.5%)	32 (53.3%)	44 (50.6%)
Chi Square	**0.13**		**1.50**		**0.11**	
Significance	**p=.72**		**p=.22**		**p=.74**	

Age of Clients

The average age of the 147 clients who took part in the study was 72.9 and ranged from 22 to 93 years. Over half of the clients (55.1%) were 75 years or older, 26.5% were between 65 and 74 years old, 10.9% were between 50 and 64 years old, and just 7.5% were less than 50 years old (see Figure 6.2). The average age of clients did not differ significantly between those who were in day hospital programs (74.1) and those who were in day support programs (72.3). Neither were there significant differences in age by geographical location or program type. Age did not differ on the basis of gender, marital status, living situation, level of education, competency, or presence of a caregiver.

Marital Status of Clients

Most clients were either married (52.4%) or widowed (35.4%). The remainder had never been married (6.8%) or were divorced (4.8%) or separated (0.7%). When comparisons were made on the basis of model of care, program type, and geographical location between those who were married and those who were not, there were no significant differences (see Table 6.2). No differences were found when marital status was examined on the basis of age group, level of education, or level of competency. However, as might be expected, all of those who were unmarried lived alone, while 68.1% of those who lived with someone were married ($\times^2$=47.6, p<.01). Male clients (74.6%) were also much more likely to be married than female clients (31.6%) ($\times^2$=27.3, p<.01). Only 8.3% of clients who did not have a caregiver were married, while 61.0% of those who had a caregiver were married ($\times^2$=22.3, p<.01).

Figure 6.2 Age Groups of Clients

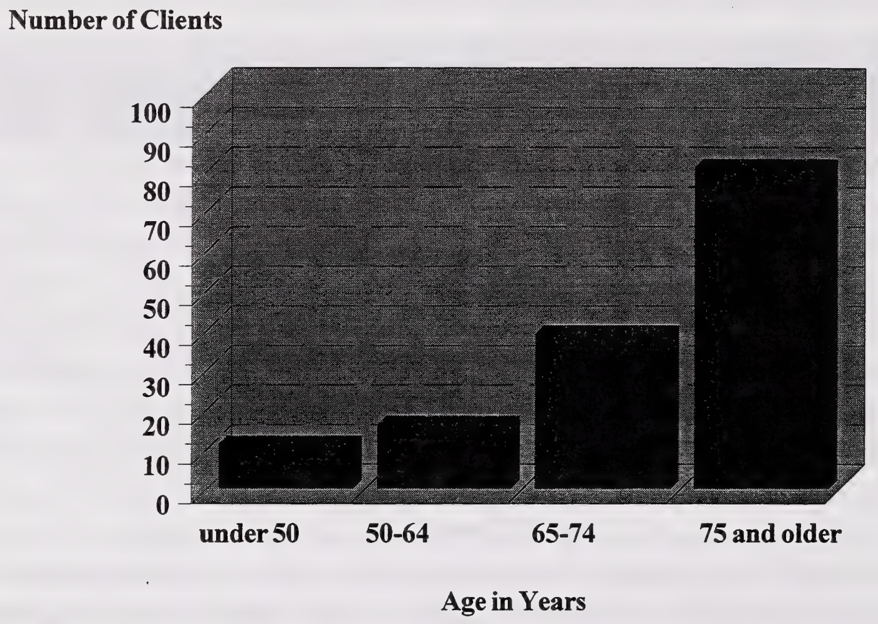


Table 6.2 Marital Status by Model of Care, Program Type and Geographical Location

	Model of Care		Program Type		Geographical Location	
Marital Status	**Day Hospital**	**Day Support**	**Demonstration Sites**	**Comparison Sites**	**Rural Sites**	**Urban Sites**
Married	31 (55.4%)	46 (50.5%)	37 (48.7%)	40 (56.3%)	29 (48.3%)	48 (55.2%)
Not Married	25 (44.6%)	45 (49.5%)	39 (51.3%)	31 (43.7%)	31 (51.7%)	39 (44.8%)
Chi Square	**0.32**		**0.86**		**0.67**	
Significance	**p=.57**		**p=.35**		**p=.41**	

Educational Level and Language of Clients

The level of education completed by clients varied with 12.2% reporting grades 1 to 6, 39.5% grades 7 to 9, 35.4% grades 10 to 12, and 11.6% post secondary. Two individuals (1.4%) did not specify the level of education attained. The level of education did not differ by model of care, program type, or geographical location (see Table 6.3). Significant differences were not found by gender, marital status, age, living situation, presence of caregiver, nor by level of competency. The majority of clients (89.1%) listed English as their language of choice.

Table 6.3 Level of Education by Model of Care, Program Type, and Geographical Location

	Model of Care		Program Type		Geographical Location	
Level of Education	**Day Hospital**	**Day Support**	**Demonstration Sites**	**Comparison Sites**	**Rural Sites**	**Urban Sites**
Grades 1-6	9 (16.1%)	9 (10.1%)	9 (12%)	9 (12.9%)	8 (13.6%)	10 (11.6%)
Grades 7-9	25 (44.6%)	33 (37.1%)	30 (40.0%)	28 (40.0%)	24 (40.7%)	34 (39.5%)
Grades 10-12	14 (25.0%)	38 (42.7%)	29 (38.7%)	23 (32.9%)	22 (33.7%)	30 (34.9%)
Post-secondary	8 (14.3%)	9 (10.1%)	7 (9.3%)	10 (14.3%)	5 (8.5%)	12 (14.0%)
Chi Square	**4.99**		**1.12**		**1.07**	
Significance	**p = .17**		**p = .17**		**p = .78**	

Occupation of Clients

The most frequently reported last or current occupations for clients were as farmers (19.0%) or homemakers (18.4%). In descending order of frequency, the remaining clients stated that their last or current occupation was in clerical/sales work (12.2%), unskilled work (10.2%), semi-skilled work (9.5%), professional work (8.2%), management (7.5%), skilled work (6.8%), or semi-professional work (5.4%). A small number (2.7%) reported that they had never been in the workforce. There were insufficient numbers to examine differences by model of care, geographical location, program type, or demographic variables.

Living Arrangements of Clients

Most clients (69.4%) lived in private homes, while the remainder lived in apartments (17.0%), lodges (8.8%), nursing homes (1.4%), or some other location (3.4%). On average, clients had lived in their current place of residence for 13.3 years. The length of stay ranged from one month to 55 years.

Most clients (42.9%) lived with a spouse, while a further 25.2% lived with other family members. The remainder lived alone (22.4%) or with someone else (8.2%). Living arrangements were not reported for two clients. In Table 6.4, living arrangements by model of care, geographical location, and program type are displayed. In most cases (89.1%) the current living arrangements were considered adequate by clients. However, a relatively small number of clients (10.9%) stated that their current living arrangements were not adequate.

Table 6.4 Living Arrangements by Model of Care, Program Type, and Geographical Location

	Model of Care		**Program Type**		**Geographical Location**	
Living Situation	**Day Hospital**	**Day Support**	**Demonstration Sites**	**Comparison Sites**	**Rural Sites**	**Urban Sites**
Alone	13 (23.2%)	20 (22.0%)	17 (22.4%)	16 (22.5%)	16 (26.7%)	17 (19.5%)
With Spouse	26 (46.4%)	37 (40.7%)	30 (39.5%)	33 (46.5%)	24 (40.0%)	39 (44.8%)
With Family	11 (19.6%)	26 (28.6%)	18 (23.7%)	19 (26.8%)	13 (21.7%)	24 (27.6%)
Other	5 (8.9%)	7 (7.7%)	9 (11.8%)	3 (4.2%)	6 (10.0%)	6 (6.9%)
Not Reported	1 (1.8%)	1 (1.1%)	2 (2.6%)	0 (0.0%)	1 (1.7%)	1 (1.1%)
Chi Square	**1.58**		**5.04**		**1.98**	
Significance	**p=.81**		**p=.28**		**p=.74**	

Legal Decision Making Status of Clients

Appointment of a power of attorney to another individual was reported for 28.6% of clients, guardianship was reported for a further 2.7% and trusteeship also for 2.7%. The remaining 66.0% had no one appointed to make decisions on their behalf. The proportion of clients with someone appointed to make decisions on their behalf did not differ by model of care, program type, or geographical location (see Table 6.5). No differences were found on the basis of gender, marital status, level of education, or living situation. Differences by age group could not be determined due to insufficient numbers in the sample.

However, as one might expect only 4.2% of those who did not have a caregiver reported having someone appointed to make decisions on their behalf, compared to 39.8% of those who did have a caregiver ($\times^2$=11.4, p<.01). Similarly those who were considered cognitively impaired (51.0%) were more likely to have an appointed decision maker than those who were cognitively intact (25.0%) ($\times^2$=14.4, p<.01). The majority of this sample are cognitively intact and living in their own homes. However, it is interesting to note that almost half of the clients who were cognitively impaired did not have someone appointed to make decisions on their behalf. It is likely that most older people are reluctant to relinquish legal decision making authority to another person, even a close and trusted relative until it becomes absolutely necessary to do so.

Table 6.5 Legal Decision Making Status of Clients by Model of Care, Program Type, and Geographical Location

	Model of Care		Program Type		Geographical Location	
Appointee	**Day Hospital**	**Day Support**	**Demonstration Sites**	**Comparison Sites**	**Rural Sites**	**Urban Sites**
None	42 (75.0%)	55 (60.4%)	45 (59.2%)	52 (73.2%)	37 (61.7%)	60 (69.0%)
Guardian	1 (1.8%)	3 (3.3%)	3 (3.9%)	1 (1.4%)	3 (5.0%)	1 (1.1%)
Trustee	0 (0.0%)	4 (4.4%)	2 (2.6%)	2 (2.8%)	3 (5.0%)	1 (1.1%)
Power of Attorney	13 (23.2%)	29 (31.9%)	26 (34.2%)	16 (22.5%)	17 (28.3%)	25 (28.7%)
Chi Square	**4.77**		**3.72**		**4.16**	
Significance	**p=.19**		**p=.29**		**p=.24**	

Sources of Government Income

Clients were asked to indicate what sources of government income they were currently receiving. Most clients (76.9%) were receiving old age security. More than half (57.1%) reported receiving Canada pension plan payments. Guaranteed income supplements were being received by 30.6%. Eight clients (5.4%) reported receiving Alberta Assured Income for Severely Handicapped (AAISH). Seven (4.8%) reported receiving widow's allowance. Social assistance was reported by 2.0% of clients. Other forms of government income were reported by 19.7% of clients. There were insufficient numbers to test for significant differences in sources of government income by demographic variables. In Table 6.6, sources of income are broken down by model of care, geographical location, and program type. Those in day hospitals were more likely than those in day support programs to be receiving Old Age Security, while those in day support programs were more likely to be receiving Widow's Allowance than those in day hospitals. Differences by program type and geographical location are identified in Table 6.6.

Table 6.6 Sources of Government Income by Model of Care, Geographical Location, and Program Type (Percentages)

	Old Age Security	Canada Pension Plan	GIS/ AAIP	AAISH	Widow's Allowance	Social Assistanc	Other
Day Hospital	85.7	57.1	30.4	1.8	0.0	0.0	19.6
Day Support	71.4	57.1	30.8	7.7	7.7	3.3	19.8
Chi Square	3.98	0.00	0.00	2.35	4.52	1.88	0.00
Significance	*p<.05	p=1.0	p=.96	p=.13	*p<.05	p=.17	p=.98
Demonstration	73.7	43.4	36.8	5.3	9.2	2.6	11.8
Comparison	80.3	71.8	23.9	5.6	0.0	1.4	28.2
Chi Square	0.90	12.10	2.88	0.01	6.87	0.27	6.18
Significance	p=34	*p<.01	p=.09	p=.92	**p<.01	p=.60	*p<.05
Rural	71.7	51.7	36.7	8.3	6.7	3.3	15.0
Urban	80.5	60.9	26.4	3.4	3.4	1.1	23.0
Chi Square	1.54	1.24	1.75	1.65	0.81	0.85	1.43
Significance	p=21	p=27	p=.19	p=20	p=.37	p=36	p=23

Comparison of Demographic Variables of Clients Who Completed the Study with Those Who Did Not

Clients who completed the study were similar to those who did not on the demographic variables of gender, age, educational level, and living situation. However, those who were married were somewhat more likely to complete the study than non-married individuals ($\times^2=3.9$, $p<.05$). It is possible that spouses of these individuals provided support and encouragement to clients to continue participation in the study. The percentage of clients who were competent who completed the study was 68.8%, somewhat higher than the percentage of cognitively impaired clients (54.9%) who completed the study, but this difference was not statistically significant. In Table 6.7, a summary of demographic variables contrasted by model of care is provided. There were no significant differences noted on any of the demographic variables between those in day support programs and day hospital programs.

Table 6.7 Demographic Variables Contrasted by Model of Care	
Gender	--no significant difference
Age	--no significant difference
Marital Status	--no significant difference
Educational Level	--no significant difference
Occupation	--insufficient numbers to examine differences
Living Arrangements	--no significant difference
Legal Decision Making Status	--no significant difference

Information about the Caregivers and Families of Clients

Some information about caregivers and families of clients was collected at the time of the first interview. In this section, a brief description of the information about caregivers and families obtained through completion of the client information form is presented. Further caregiver data are presented in the following chapter.

Relationship to Client and Health Status of Caregiver

All but 24 of the 147 clients in the study (16.3%) reported having an informal caregiver. All 123 caregivers except for one took part in the study. The relationship of caregivers to clients was as follows: spouse (49.7%), daughter (18.4%), son (5.4%), parent (2.7%), daughter-in-law (2.0%), sibling (1.4%), friend (1.4%), other family member (1.4%) and someone else (2.0%). The relationship of the caregiver to client by model of care is included in Table 6.8. Clients in day support programs (88.9%) were more likely to have a caregiver than clients in day hospital programs (75.0%) ($\times^2$=5.0, p<.05). Caregivers were considered to be frail 12.2% of the time, with almost half (47.5%) of the caregivers having chronic health problems. The day hospital group

Table 6.8 Relationship of Caregivers by Model of Care

Relationship	Day Hospital	Day Support
None	14 (25.0%)	10 (11.1%)
Spouse	29 (51.8%)	43 (47.8%)
Daughter	5 (8.9%)	22 (22.4%)
Son	3 (5.4%)	5 (5.6%)
Daughter-in-Law	0 (0.0%)	3 (3.3%)
Sibling	1 (1.8%)	1 (1.1%)
Parent	1 (1.8%)	3 (3.3%)
Family Member	1 (1.8%)	0 (0.0%)
Friend	0 (0.0%)	2 (2.2%)
Other	2 (3.6%)	1 (1.1%)
Chi Square	**14.8**	
Significance	**p=.10**	

incorporates a psychiatric day hospital program in which most clients did not have caregivers. There were no significant differences for this variable on the basis of urban/rural or comparison/demonstration sites. There were also not significant differences for this variable by age group or level of education. As would be anticipated, 96.1% of clients who were cognitively impaired had a caregiver, compared to 77.1% of cognitively intact clients with caregivers ($\times^2$=8.8, p<.01). Men (95.8%) were also more likely to have a caregiver than women (72.4%) ($\times^2$=14.7, p<.01), as were married individuals who reported a caregiver in 97.4% of instances compared to 68.6% of those who were not married ($\times^2$=22.3, p<.01). Finally, those who lived alone were substantially less likely to have a caregiver than those who lived with someone, 36.4% and 97.3% respectively ($\times^2$=69.1, p<.01).

Health Status of Family Members

Chronic illness of a family member was reported by 42.9% of clients. No client reported that a family member had a terminal illness, although 24.5% of clients had experienced the recent death of a family member or close friend within the last year. The average length of time since the death was reported to be six months, and ranged from zero to 12 months. In five instances (13.9%) the client had lived with the deceased. The relationship of the client to the deceased was as follows: spouse (13.9%), child (13.9%), sibling (13.9%), friend (13.9%), and parent (8.3%). In the remaining eight instances (36.1%) clients reported that more than one person had died. Six clients (4.1%) reported having a handicapped dependent.

Contact of Client with Family Members

Daily face to face contact with family members other than those living with the client was reported for 14.3% of clients. At least weekly contact was reported by almost half of the clients (49.0%), twice monthly contact for 12.9%, and monthly contact for 4.8% of clients. Less frequent contact than monthly was reported by 19.0% of clients. There were no significant differences by model of care (see Table 6.9). Neither were significant differences found by program type, geographical location, level of competency, gender, marital status, or living situation. There were insufficient numbers to test for differences on the basis of age group, level of education, or presence of caregiver.

Table 6.9 Face to Face Contact by Model of Care

	Day Hospital	**Day Support**
Daily	9 (16.1%)	12 (13.2%)
Weekly	32 (57.1%)	40 (44.0%)
Twice Monthly	5 (8.9%)	14 (15.4%)
Monthly	3 (5.4%)	4 (4.4%)
Other	7 (12.5%)	21 (23.1%)

Chi Square=4.65, p=.32

Telephone contact with family members took place daily for 27.9% of clients, weekly for 45.6% , twice monthly for 6.8% , monthly for 6.1%, and less than monthly for 12.9%. No differences were noted between day support and day hospital clients (see Table 6.10), nor on the basis of program type, geographical location, level of competency, marital status, living situation, or presence of caregiver. Differences by age group, gender, and level of education could not be examined due to small sample size. These results point to considerable contact between clients and their families. This is but further evidence refuting the widely-held stereotype that the majority of elderly people have been abandoned by their families. Shanas (1979) has referred to this as a "hydra-headed monster" because it is so widespread and so difficult to dispel.

Table 6.10 Phone Contact by Model of Care

	Day Hospital	Day Support
Daily	20 (35.7%)	21 (23.3%)
Weekly	26 (46.4%)	41 (45.6%)
Twice Monthly	5 (8.9%)	5 (5.6%)
Monthly	2 (3.6%)	7 (7.8%)
Other	3 (5.4%)	16 (17.8%)
Chi Square=7.55, p=.11		

Comparison of Caregiver and Family Variables of Clients Who Completed the Study with Those Who Did Not

On variables relating to the caregivers and clients of families there were no notable differences between the group who completed the study and those who did not. Those who completed the study were no more likely to have a caregiver than those who did not. The frequency of contact by phone and in person did not differ between those who completed the study and those who did not. The frailty of the caregiver did not differ between those who completed the study and those who did not, neither did the likelihood of the client to be living with someone with a chronic illness. There was also no difference in the probability of a friend or relative of the client dying in the preceding year between those who completed the study and those who did not.

Health Care Utilization

Health care utilization data were collected on two occasions, at the time of the first interview with the client at either Time 1, Time 2, or Time 3, and at the final Time 5 interview. In this section, descriptive information about health care utilization is presented for the 147 clients who took part in the study. The data, when appropriate, were examined by model of care, geographical location, program type, and selected demographic variables. As well, differences between results at the time of the first interview (Time 1, 2, or 3) and that of the final interview (Time 5) are discussed for the 94 clients who completed the study. Finally, differences between the group of clients who completed the study and those who did not are presented.

Medication Usage

Table 6.11 Medication Usage of Selected Clients (n = 147)

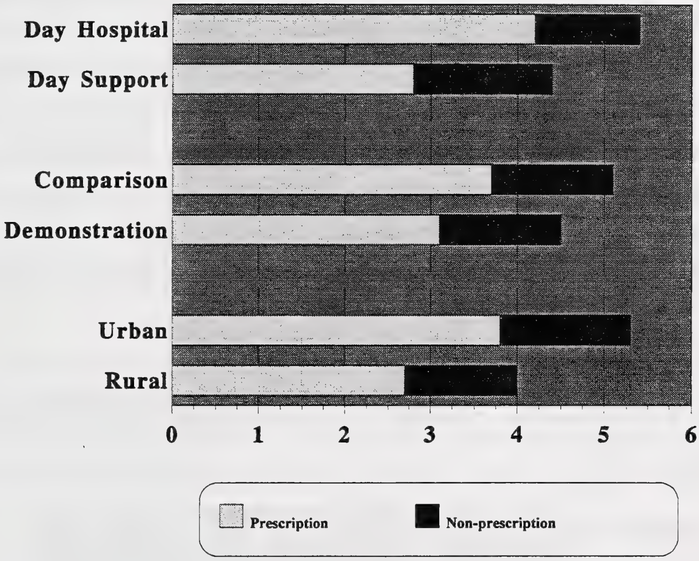
Category	Percent of Responses	Percent of Cases**
Antimicrobials	1.9	9.7
Antineoplastic	0.4	2.2
Autonomic Nervous System	0.9	4.5
Cardiovascular	14.5	75.4
Central Nervous System	30.9	160.4
Dermatomucosal	0.7	3.7
Eye, Ear, Nose, and Throat	1.3	6.7
Fluid and Electrolyte	8.2	42.5
Gastrointestinal	16.3	84.3
Hematologic	3.0	15.7
Hormonal Agents	5.9	30.6
Immunomodulation	0.1	0.7
Investigational	0.0	0.0
Nutritional	6.8	35.1
Respiratory Tract	3.0	15.7
Miscellaneous	6	31.3

*Percent of responses represents the number of medications reported for each category divided by the total number of medications reported.
**Percent of cases represents the number of medications reported for each category divided by the total number of clients (n=147).

Medication use is one reflection of acute and chronic illness in the elderly. The use of prescription drugs is a direct reflection of the use of physician's services and an indirect reflection of the services of the professionals who may have assisted the client in relation to the problem. Non-prescription drug use may also reflect the use of professional health care services. On average, clients were taking 4.8 medications, the number ranging from none (reported by 8.2%) to 14 (reported by 1.4%). On average 3.4 of these were prescription medications and 1.4 were non-prescription. For the group of 134 clients who reported taking medication, the total number of medications reported was 695. Laxatives (42.5%), non-narcotic analgesics (42.5%), antianginals (35.8%), and vitamins and minerals (35.1%) were the drugs most frequently reported by clients. Medications were grouped into one of 16 categories and these are listed in Table 6.11. In Figure 6.3, the average number of medications is reported by model of care, geographical location, and program type. Those in day hospitals were, on average, taking more prescription medications than those in day support. Those in urban sites were taking more medications in total and more prescription medications than those in rural sites. There were no significant differences between the number of medications taken by clients in demonstration and comparison sites.

At the time of the first interview, women reported taking an average of 5.3 medications and men reported 4.2, a difference which was statistically significant ($F=3.8$, $p<.05$). Cognitively intact clients, who averaged 5.5 medications each, were taking significantly more medications than cognitively impaired clients who averaged only 3.4 ($F=13.7$, $p<.01$). The fact that competent clients were taking more medications than those who were cognitively impaired may be an indication of less focus on healing the physical health problems of this group. This may be due to inability of these clients to express their concerns and/or to the development of different goals of care for these clients, goals which centre on providing a safe and harmonious environment, rather than treating physical health problems. There was no difference in the number of medications on the basis of living situation, level of education, marital status, or age group. Those in the youngest age group (1.8) did however report taking significantly fewer prescription medications than those in the 50 to 64 year old age group (4.7) (F=3.5, p<.05). Those who had a caregiver averaged a total of 4.4 medications compared to 6.7 medications for those without a caregiver (F=8.9, p<.01). An average of 3.1 prescription medications for those with caregivers compared to 4.6 for those without caregivers was significantly different (F=7.2, p<.01). The average number of non-prescription medications by presence of caregiver approached significance (F=3.6, p=.06) as those with caregivers averaged 1.3 and those without averaged 2.1.

Figure 6.3 Average Number of Medications

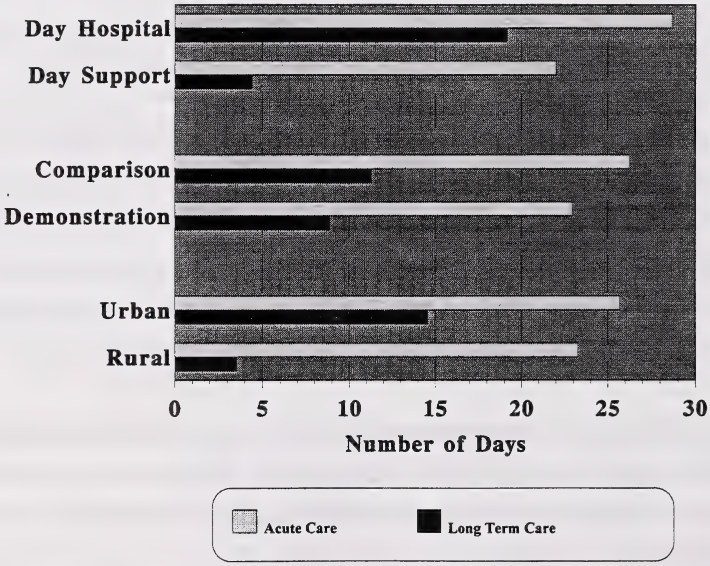


There were no significant changes in the number of medications reported from the time of the first interview to the last interview for any of the clients who completed the study when examined by model of care, program type, geographical location, gender, marital status, living situation, educational level, level of competency, presence of caregiver, or age.

Hospitalizations/Institutionalizations

At the time of their first interview clients reported spending, on average, 24.6 days in acute care facilities in the previous year. However, 59 (40.1%) had not spent any time in acute care facilities in the previous year. The variations by model of care, geographical location, and program type are indicated in Figure 6.4. There were no significant differences found on the former three variables, nor were there differences found on the basis of gender, living situation, age group, competency level, marital status, presence of a caregiver, or level of education. For the 94 clients who completed the study, the average number of acute care days reported at the time of their first interview was 24.6. At the time of the final interview, these clients reported having spent 23.0 days, on average, in acute care. This slight decline over time did not reach significance, but may represent a positive downward trend. Neither the average number of days in acute care for day support nor day hospital clients changed significantly over time. Number of acute care days from the time of the first interview to the last did not differ by geographical location or program type. There were no significant differences over time on this variable across age groups, by marital status, by level of education, by competency, by gender, by presence of caregiver, or by living situation.

Figure 6.4 Average Number of Acute/Long Term Care Days

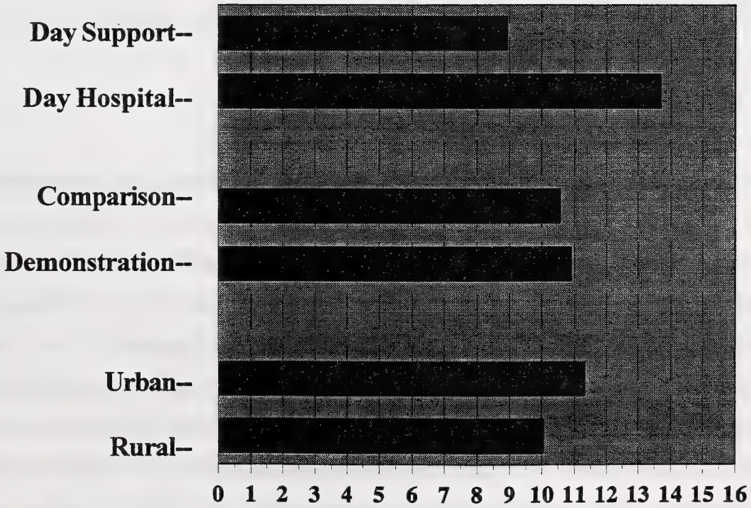


The average number of days spent in long term care facilities in the last year was 10.1, and ranged from no days for 87.1% of clients to 330 days for one client. As can be seen in Figure 6.4, those in day hospitals spent more days in long term care facilities than did day support program clients. There were no differences by program type or geographical location. Neither were there differences in the number of long term care days in the last year between men and women, by marital status, age group, level of education, living situation, presence of caregiver, or level of competency. For the 94 clients who completed the study, there was no significant difference over time in the number of days spent in long term care facilities in the previous year for the total group of clients or for either those in day support or day hospital programs. There were no differences over time on the basis of model of care, geographical location, program type, or on any of the demographic variables. These results reflect a day program clientele which is primarily engaged in independent community living. It is also a group which is becoming increasingly frail as evidenced by the degree of acute illness for which hospitalization has been required. It would seem that those being served by the day programs in this study are those who would logically be identified for additional support in order to enable them to remain in their own homes and communities despite increasing vulnerability to illness.

Physician Visits

The average number of physician visits for the 147 clients in the study was 10.8 for the last year and ranged from none for 4.1% of clients to 88 for one client. As summarized in Figure 6.5, day hospital clients visited their physician more frequently than day support clients. Physician visits did not differ by program

Figure 6.5 Average Number of Physician Visits



type or geographical location. Men averaged 8.1 physician visits in the last year which was significantly fewer than women who averaged 13.3 (F=6.3, p<.05). There were no differences in the number of physician visits between those who had varying levels of education, living situations, age, marital status, competency levels, or presence of caregiver. For the 94 clients who completed the study, there was very little difference in the number of visits reported at the time of the first interview (9.2) and at the final interview (8.9). There were no differences across time by model of care, program type, or geographical location. When the number of physician visits were compared over time by differing levels of education, marital status, gender, living situation, level of competency, presence of caregiver, and age groups, the only difference approaching significance was found in the greater than 75 year old age group, whose average physician visits decreased from 10.8 to 7.9 from the time of the first interview to the last.

Number of Falls

On average, clients reported falling 4.7 times in the last year. This ranged from no falls for 46.9% of clients to 88 falls for two individuals. The number of falls did not differ by model of care or program type, however clients in rural programs reported an average of 8.4 falls which was significantly higher than clients in urban programs who averaged 2.2, a somewhat unexpected finding (t=2.58, p<.05). The number of falls did not differ on the basis of gender, living situation, age group, marital status, level of competency, presence of caregiver, or level of education. For the group of 94 clients who completed the study there was no significant difference in the number of falls reported from the time of the first interview (4.8) until the time of the last interview (5.5). When the number of falls were examined across time for the day support and the day hospital clients, again there were no significant differences noted, neither were there differences by program type or geographical location, or any of the demographic variables. Since falls represent a significant threat to the health of the frail elderly, identifying those at greatest risk for falls is important because it allows for efforts to prevent such occurrences and for more awareness of safety in the total environment of the individual.

Utilization of Community Services

Clients were asked to indicate which of a variety of community services they were currently receiving. In Table 6.12, the services being utilized are contrasted by model of care. Few differences between services reported at the time of the first interview and those reported at the time of the final interview for the 94 clients who completed the study were noted (see Table 6.13). The community services utilized most often by clients were nurses, homemakers, and other workers such as personal aides provided through Home Care. The pattern of responses was similar to that of the larger population of clients served by the day programs (see Table 5.14). Perhaps somewhat surprising is again the small number of the frail elderly clients receiving handyman services. Given that relatives and friends may be assisting with some handyman tasks, this is perhaps an area which might be looked at more closely, for it is likely that the vulnerability of clients in this sample would mean that their need for assistance with heavy tasks would be relatively high. The availability of assistance of this nature may allow them to continue with community residence. In both the day hospital and day support groups, approximately three quarters of the clients reported utilizing some type of community support service.

Table 6.12 Utilization of Community Services by Model of Care

Type of Service	Day Hospital	Day Support
Homecare (All Services)	48.2%	46.2%
Homecare Handyman	0.0%	1.1%
Homecare Homemaker	30.4%	18.7%
Homecare Nurse	28.6%	39.6%
Homecare Other	30.4%	23.1%
Alberta Mental Health	8.9%	3.3%
Handyman	0.0%	4.4%
Homemaker	10.7%	13.2%
Lifeline	8.9%	6.6%
Meals on Wheels	5.4%	5.5%
Occupational Therapy	7.1%	1.1%
Physical Therapy	3.6%	5.5%
Podiatrist	5.4%	8.8%
Psychologist/Psychiatrist	8.9%	2.2%
Social Services	0.0%	2.2%
Victorian Order of Nurses	1.8%	9.9%
Total Receiving Community Support	**71.4%**	**79.1%**

Table 6.13 Community Services Utilized by Selected Clients by Time of Interview (n=94)

Type of Community Service	First Visit (%)	Final Visit (%)
Home Care (All Serivces)	37.6	44.7
Homecare Handyman	0.0	0.0
Homecare Homemaker	25.8	27.7
Homecare Nurse	30.1	35.1
Homecare Other	21.5	24.5
Alberta Mental Health Services	3.2	5.3
Handyman	2.2	2.1
Homemaker	10.8	11.7
Lifeline	16.1	8.5
Meals on Wheels	2.2	6.4
Occupational Therapy	1.1	3.2
Physical Therapy	3.2	2.1
Podiatrist	6.5	8.5
Psychologist/Psychiatrist	4.3	5.3
Social Services	1.1	1.1
Victorian Order of Nurses	4.3	8.5
Other	16.1	16.0
Total Receiving Community Support	**71.0**	**76.6**

* There were no significant differences between the utilization of community services from the time of the first visit to the last.

Comparison of Health Care Utilization Data of Clients Who Completed the Study with Those Who Did Not

Clients who completed the study did not differ from those who did not on the number of falls during the previous year, the total number of medications, the number of non-prescription medications, or the number of days in acute or long term care facilities during the preceding year. Those who did not complete the study were likely to be taking more prescription medications (3.9 compared to 3.0, t=2.15, p<.05) and were likely to have made more visits to the physician (13.6 compared to 9.2, t=2.06, p<.05). These findings suggest that those who did not complete the study might have been in poorer health at the time the study began.

Health Status of Clients

Diagnoses

Cerebrovascular accidents were the most common diagnosis for this group and were reported by 31.6% of the sample. Arthritis was the next most common diagnosis for 25.3%, and the third most frequent diagnosis was hypertension, with 18.5% identifying this health problem. Diagnoses were grouped into 13 categories and the results are presented in Table 6.14. Since cardiovascular disease is a leading cause of mortality and morbidity, it is not unexpected that cardiovascular disease would top the list of health problems for this group of individuals. Most of the diagnoses reported by study participants represent chronic health problems with which these people have been coping for a considerable length of time.

Table 6.14 Grouped Diagnoses of Selected Clients (n=147)

Category	Count	Pct. of Responses	Pct. of Cases
Blood Disorders	5	1.2	3.4
Circulatory Diseases	79	18.4	54.1
Digestive Disorders	24	5.6	16.4
Endocrine and Metabolic Disorders	23	5.3	15.8
Genitourinary Disorders	13	3.0	8.9
Infectious Diseases	1	0.2	0.7
Mental Problems	53	12.3	36.3
Musculoskeletal Disorders	82	19.1	56.2
Neoplasms	11	2.6	7.5
Neurological Motor Dysfunction	89	20.7	61.0
Pulmonary Disease	13	3.0	8.9
Sensory Disorders	34	7.9	23.3
Skin Disorders	3	0.7	2.1

Substance Abuse

A history of substance abuse was reported for 10.2% of clients. A history of substance abuse was reported for 8.9% of clients in day support programs, compared to 11.0% of clients in day hospital programs, a non-significant difference. No significant differences were found by program type or geographical location. In the 65 to 74 year old age group, 28.2% reported a substance abuse problem, compared to 6.3%, 3.7%, and 0.0% in the other age groups. However, there were insufficient numbers to test for the significance of this difference. No differences in the history of substance abuse were found by marital status, presence of caregiver, level of education, gender, living situation, or level of competency.

Psychiatric Problems

A history of psychiatric problems was reported for 28.6% of clients. In day hospital programs, 42.9% of clients reported a history of psychiatric problems compared to 19.8% in day support groups ($\times^2=9.4$, $p<.01$). In large part, this difference is explained by the presence of two day hospital programs which focused on the treatment of clients with psychiatric problems. It is of concern that 45.5% of those who lived alone reported a history of psychiatric problems. This percentage was significantly higher than the 23.0% of clients who lived with someone who reported such a history ($\times^2=6.4$, $p<.05$). There were no differences on the basis of program type, geographical location, age group, presence of caregiver, level of education, gender, living situation, marital status, or level of competency.

Elimination Problems

Stress incontinence was reported by 10.2% of clients, urinary incontinence by 25.2% of clients and bowel incontinence by 10.9%. No clients reported having a suprapubic catheter, ileostomy, or ureterostomy, while one had a colostomy. Three clients (2.0%) had indwelling urethral catheters. Urinary incontinence did not differ by model of care, but stress incontinence was reported by 15.4% of day support clients compared to only 1.8% by day hospital clients ($\times^2=6.8$, $p<.01$). Similarly, bowel incontinence was reported by 16.5% of day support clients, and only 1.8% of day hospital clients ($\times^2=7.6$, $p<.01$). Incontinence supplies were used by 21.1% of clients, indicating that a relatively large proportion of this sample had difficulty with control of elimination. Since these are problems which can prevent the elderly from maintaining social relationships with friends and/or family, they can affect the well-being and ultimately the health of the individual.

Comparison of Health Status of Clients Who Completed the Study with Those Who Did Not

The proportion of clients with a history of substance abuse problems did not differ between the group of clients who completed the study and those who did not. However, the group that did not complete the study had a somewhat higher proportion of individuals with a history of psychiatric problems than did the group who completed the study, 39.6% and 22.3% respectively ($\times^2=5.0$, $p<.05$). Significant differences were not found between those who completed the study and those who did not for the frequency of either stress incontinence, urinary incontinence, or bowel incontinence.

Alberta Assessment and Placement Instrument Questions

Ineffective Coping

This question required the data collectors to provide an overall assessment of the client's ability to cope in cooperation with the clients and caregivers, taking into consideration such issues as depression and anxiety. Scores could range from one (no intervention required for client to cope effectively) to six (more than two hours daily intervention required). The average score for the 147 clients in the study was 2.4 and ranged from one (40.8% of clients) to six (4.1%). Those in day hospital programs had an average score of

2.9, and those in day support programs had an average score of 2.1, a significant difference (t=-3.2, p<.01). Significant differences were not found by program type or geographical location for this variable. Ability to cope did not differ between genders, age groups, living situation, level of competency, marital status, presence of caregiver, or level of education.

Scores in the group that completed the study at the time of the first interview averaged 2.2. At the time of the final interview, the average score was 1.9. Although this difference was not statistically significant for the total group, there was a significant difference in the scores of clients who attended day hospital programs (F=6.1, p<.05) over time, whose scores at the time of the first interview averaged 2.8 and at the time of the final interview averaged 2.0 (see Table 6.15). There was no difference over time for those in day support programs. The scores of those in comparison sites also decreased over time (F=8.1, p<.01) (see Table 6.14). There were no significant differences between urban and rural clients. Scores of those who were in the cognitively intact group decreased over time from 2.3 to 1.8 (F=4.7, p<.05). There were no differences over time on the basis of gender, marital status, education, age, or living situation. The scores for those clients without caregivers, decreased over time from 2.1 to 1.4 (F=5.8, p<.05). Scores for those with caregivers did not change significantly over time. Lower scores on this variable represent less need for intervention and greater self-reliance, so the trends represented are positive ones. However, because of the low reliability of scores on this AAPI item, it is difficult to deter-mine if these results are truly accurate.

Table 6.15 (AAPI) Ineffective Coping by Model of Care and Program Type (Mean)

	First Visit	Final Visit	F	Significance
Day Hospital	2.8	2.0	6.06	*p<.05
Day Support	2.0	1.9	0.03	p=.85
Comparison	2.0	1.4	8.11	**p<.01
Demonstration	2.5	2.4	0.02	p=.90
Total	2.2	1.9	2.20	p=.14

Potential for Injury to Self

Injury to self was rated from one, no intervention, to seven, intervention required every 15 minutes. The average score on this item was 2.5 and ranged from 1 (47.6% of clients) to 7 (2.0% of clients). A non-significant difference was found between the average score of day hospital programs (2.6) and day support programs (2.5). A significant difference (t=2.8, p<.01) was found by program type as demonstration sites had an average of 2.9 and comparison had a 2.1 average. There was no significant difference found by geographical location. Potential for injury to self did not vary by age, gender, level of education, living situation, marital status, presence of caregiver, or level of competency. In the group completing the study, scores averaged 2.5 at the time of the first interview and 2.1 at the final interview, a difference that approached statistical significance. Lower scores on this item represent less need for intervention and greater independence. The potential for injury to self decreased in the day hospital group from an average of 2.6 at the first interview to 1.7 at the final interview, but did not change over time for day support groups (F=5.5, p<.05) (see Table 6.16). The potential for injury also decreased significantly for urban clients, but not for rural clients (see Table 6.16). There were no differences over time for either demonstration or comparison site clients. Neither were there any significant changes over time on the basis of gender, age, education, marital status, living situation, or presence of a caregiver. The scores of competent clients did change over time decreasing from 2.4 at the time of the first interview to 1.8 at Time 5 (F=3.8, p<.05). Again, the trends noted are all in a positive direction suggesting either that clients' health and functional status had improved and they were at a less risk for injury, or that measures had been taken to create a safer environment which would reduce the potential for injury.

Table 6.16 (AAPI) Potential Injury to Self by Model of Care and Geographical Location

	First Visit	Final Visit	F	Significance
Day Hospital	2.6	1.7	5.47	*p<.05
Day Support	2.5	2.8	0.28	p=.60
Rural Sites	2.8	2.7	0.10	p=.75
Urban Sites	2.3	1.7	4.93	*p<.05
Total	**2.5**	**2.1**	**2.74**	**p=.10**

Potential for Injury to Others

Injury to others was rated in a similar manner to that for potential for injury to self. The average score on this item was 1.2 and scores ranged from one (87.1%) to seven (0.7%). There were no significant differences found by model of care, program type, or geographical location. Day hospitals had an average score of 1.0 while day support programs had a slightly higher score of 1.2. Potential for injury to others ratings did not differ across gender, level of education, age group, by level of competency, presence of caregiver, or living situation. There was a small, but significant difference between those who were married (1.3) and those who were not (1.0) at the time of the first interview (F=3.8, p<.05). For the 94 clients who completed the study there was no significant difference in the scores over time for potential for injury to others. There was no difference over time by model of care (see Table 6.17), nor by program type or geographical location. The scores of those who were married decreased from 1.3 to 1.0 over time (F=3.9, p<.05). However, there were no differences on the basis of gender, age, education, living situation, presence of a caregiver, or level of competency. Clients in day programs were by and large at a very low

Table 6.17 (AAPI) Potential Injury to Others by Model of Care

	First Visit	Final Visit	F	Significance
Day Hospital	1.1	1.1	0.21	p=.65
Day Support	1.2	1.1	1.99	p=.16
Total	**1.2**	**1.1**	**0.75**	**p=.39**

risk for potential injury to others, and there was little room for improvement over time. For the most part, clients who were aggressive or physically abusive towards others were not considered to be suitable candidates for admission to day programs, as neither current staffing levels nor physical settings of programs were designed to accommodate their specific needs.

Management of Incontinence

Management of urinary incontinence was rated on a scale from one (no alteration in urinary functioning) to five (unable to manage urinary incontinence). The average score on this item was 1.8 and scores ranged from one (59.9% of clients) to five (6.1% of clients). Ten clients (6.8%) reported following a bladder routine. A difference was not found between day hospital and day support clients' ability to manage urinary incontinence as their average scores were 1.5 and 1.9 respectively. No differences were found by program type or geographical location. When examined over time there were no differences in clients' ability to manage urinary incontinence on the basis of model of care, program type, or geographical location. Management of bowel incontinence was rated on a scale from one (no alteration in bowel functioning) to five (unable to manage bowel incontinence). Most clients (72.8%) reported no alteration. The average score was 1.6. A bowel routine was reported for 17.0% of clients. Day hospital clients' average score was 1.4, for ability to manage bowel incontinence, which was not significantly different from day support clients whose average score was 1.7. There were no significant differences at the time of the first interview on the basis of program type or geographical location, neither were there any differences over time in the ability of clients to manage bowel incontinence on the basis of model of care, program type, or geographical location.

Activities of Daily Living

Independence in Eating

Independence in eating, dressing, toileting, and transferring was measured on a six point scale from one, independent, to six, requires the assistance of two persons. Most clients (76.9%) could feed themselves independently. The average score on this item was 1.6. A significant difference was not found between day hospital programs (1.4) and day support programs (1.6). Nor were significant differences found by program type or geographical location. Scores on independence in eating did not vary by gender, competency level, marital status, presence of caregiver, or level of education. Those who lived alone averaged 1.2 for this item and those who lived with someone(s) averaged 1.7, a difference which approached significance (F=3.8, p=.053). There were significant differences between those who lived alone and both those who lived with other family members and those who lived in alternate arrangements. Those who were in the 75 year and older age group were less likely to require assistance with eating than those in the 50 to 64 year old age group (F=3.0, p<.05). There was also a significant difference between those who lived with a spouse and those who lived with other family members (F=4.2, p=<.01). For the group completing the study, there was no significant difference on this variable from the time of the first interview to the final interview by model of care (see Table 6.18) or by geographical location or program type. When examined across the variables of gender, age groups, living situation, marital status, presence of a caregiver, level of competency, and level of education, there were no significant differences.

Table 6.18 Independence in Eating by Model of Care

	First Visit	Final Visit	F	Significance
Day Hospital	1.3	1.5	1.65	p=.20
Day Support	1.5	1.6	1.10	p=.76
Total	**1.4**	**1.5**	**0.89**	**p=.35**

Independence in Dressing

Dressing was a task which could be completed independently by 56.5% of clients. The average score on this item was 2.4. Day hospital programs with an average score of 2.1 and day support programs with an average score of 2.5 did not differ on this variable, nor did program type and geographical location. There were no significant differences on independence in dressing by gender, age, level of competency, or level of education. However, there were significant differences between the group who lived alone where the average score was 1.6, and those in groups living with a spouse (2.5) and the group living with other family members (2.6) (F=3.8, p<.05). Those who were married (average score 2.6) were more likely to require assistance in dressing than those who were not whose average score was 2.1 (F=4.3, p<.05). Those who had caregivers were also more likely to require assistance (2.5) compared to those without caregivers (1.5) (F=9.3, p<.01). There was no significant difference between the first and final interview scores on this variable for those completing the study by model of care, (see Table 6.19), or by program type or geographical location. Neither were there any differences across age groups, gender, competency level, presence of caregiver, living situation, level of education, or marital status.

Table 6.19 Independence in Dressing by Model of Care

	First Visit	Final Visit	F	Significance
Day Hospital	1.7	1.7	0.04	p=.85
Day Support	2.3	2.6	1.61	p=.21
Total	**2.1**	**2.3**	**0.88**	**p=.35**

Independence in Toileting

Most clients (62.6%) managed toileting independently. Scores on this item averaged 1.9. There was no significant difference by model of care as day hospitals had an average of 1.6 and day support programs an average score of 2.1. Scores on this item did not vary by program type, geographical location, gender, or marital status. Those in the 65 to 74 year old age group had lower average scores (1.4) than did those in the 50 to 64 year old age group (2.7) (F=3.3, p<.05). Those who lived alone had lower scores (1.3) than did those in either the living with other family members' group (2.5) or the living in alternate arrangements groups (2.4). As well, those in the living with spouse group had lower scores (1.9) than those in the living with other family members' group (2.5) (F=5.8, p<.01). Those who were cognitively impaired had significantly higher scores (2.2) on this item compared to those who were not cognitively impaired (1.7)) (F=4.0, p<.05). Those who had post secondary education had lower average scores (1.8) than did those in the grade 7 to 9 education group (F=2.8, p<.05). Those with caregivers were more apt to require assistance (2.0) than those without caregivers (1.4), a difference which approached significance (F=3.2, p=.08). The average score for clients completing the study at the time of the first interview was 1.6. This increased slightly over time to 1.8, but the change was not statistically significant (see Table 6.20).

There were no differences by model of care, geographical location, or program type, or on any of the demographic variables previously mentioned for independence in toileting.

Table 6.20 Independence in Toileting by Model of Care

	First Visit	Final Visit	F	Significance
Day Hospital	1.4	1.5	0.64	p=.43
Day Support	1.8	2.0	0.85	p=.36
Total	**1.6**	**1.8**	**1.37**	**p=.24**

Independence in Transferring

Clients were able to transfer independently in 60.5% of cases. The average score for transferring was 1.7. A significant difference was not found by model of care as day hospital programs and day support programs had an average score of 1.7. A significant difference was found by program type with demonstration sites having an average score of 1.5 and comparison sites 2.0 (t=-2.8, p<.01). There were no significant differences on this variable by geographical location, gender, level of education, age, marital status, living situation, presence of caregiver, or level of competency. For the group that completed the study the average scores were 1.6 at the time of the first interview and 1.8 at the last. This difference was not statistically significant, nor were there any differences by model of care (see Table 6.21), program type, geographical location, or on the basis of age group, gender, marital status, level of competency, presence of caregiver, living situation, or level of education.

Table 6.21 Ability to Transfer by Model of Care

	First Visit	Final Visit	F	Significance
Day Hospital	1.5	1.7	0.45	p=.50
Day Support	1.6	1.9	1.79	p=.18
Total	**1.6**	**1.8**	**2.22**	**p=.14**

Comparison of AAPI Responses of Clients Who Completed the Study with Those Who Did Not

Clients who completed the study and those who did not, did not differ on the variables of ineffective coping, potential for injury to others, or potential injury to self. However, clients who completed the studies were significantly more independent in activities of daily living. Scores for independence in eating averaged 1.4 for clients completing the study and 1.8 for those who did not ($\times^2=4.7$, p<.05); for independence in dressing, scores averaged 2.1 for those who completed and 2.9 for those who did not ($\times^2=9.7$, p<.01); for independence in toileting there was a similar trend, with scores averaging 1.6 for those who completed the study and 2.4 for those who did not ($\times^2=10.9$, p<.01); and finally, scores of those completing the study on independence in transferring averaged 1.6 and 2.1 for those who did not ($\times^2=6.0$, p<.05). Again, these differences suggest that the group who did not complete the study was more physically challenged than the group that did.

Day Program Information

Clients were asked to indicate the number of days and hours per week they attended the day program and their anticipated length of stay in months. On average clients were attending day programs 1.8 days per week. Day hospital clients averaged 2.0 days per week which was significantly more than day support clients who averaged 1.7 days (t=-2.1, p<.05). There were no differences by program type or geographical location. Days per week in attendance decreased from 1.8 to 1.6 over time for the group that completed the study, a difference which approached significance. The number of days per week for clients in day hospital programs decreased significantly from 2.0 to 1.5 (F=7.4, p<.01), which would not be surprising given the greater turnover of clients in such programs. There was no significant difference over time for those in day support programs, which suggests that they are fulfilling an ongoing long term need. A similar trend was noted for comparison sites, in which the average days per week decreased from 1.8 to 1.5 (F=4.4, p<.05), most likely a result of the higher proportion of day hospitals in this program. There were no differences over time by demonstration sites or geographical location. The number of clients attending once weekly was 41 (27.9%), twice weekly was 81 (55.1%), three times weekly was 13 (8.8%), four times weekly was one (0.7%), and five times weekly was one (0.7%). Information about days per week of attendance was not available for 10 clients.

The average number of hours reported was 10, and this figure ranged from three to 51 hours. Day hospital clients averaged 11.1 hours per week while day support clients averaged 9.3, again a significant difference (t=-2.2, p<.05). No differences were found by program type or geographical location. Just over half (50.3%) of clients reported their anticipated length of stay as "ongoing". For the 36 clients who were able to estimate their anticipated length of stay, the average was 5.2 months. Day hospital clients averaged 4.7 months for their anticipated length of stay, a lower figure than the average of 6.8 months reported by day support clients. Although this difference was not statistically significant, it may have practical significance. No significant differences were found by program type or geographical location.

Comparison of Day Program Data of Clients Who Completed the Study with Those Who Did Not

There was no significant difference in the number of days in attendance per week of those who completed the study and those who did not. Those who did not complete the study averaged 11.3 hours per week compared to 9.4 for clients who did complete the study, a significant difference (F=4.2, p<.05). The anticipated length of stay did not differ significantly between the two groups.

Summary of Client Variables Measured at First and Last Visit

In Table 6.22, differences in health care utilization rates and scores on AAPI questions from the time of the first visit to the last visit are compared for the total group and for various subgroups of the sample. As indicated in the table, there were no significant changes in health care utilization over time. There were several positive gains noted for various subgroups on the potential for injury to self and potential injury to others variable, as well as for the ineffective coping variable. However, as noted earlier, scores on the ineffective coping variable may not be reliable.

Table 6.22 Changes Over Time--All Clients--Variables Measured At First and Last Visit

Variable	Model of Care		Geographic Location		Program Type		Gender	Competency		Presence of Caregiver		Married		Age	Lives Alone	Level of Education	Total Group		
	Day Hospital	Day Support	Urban	Rural	Comparison	Demonstration		Cognitively Impaired	Cognitively Intact	Yes	No	Yes	No				First Visit	Last Visit	Significant Difference
Medication Usage	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	4.7	4.6	no
Days in Acute Care Facilities	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	24.6	23.0	no
Days in Long Term Care Facilities	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	9.4	13.0	no
Physician Visits	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	9.2	8.9	no
Number of Falls	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	4.8	5.5	no
Utilization of Community Services	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	71.0%	76.6%	no
Ineffective Coping	* P	no	no	no	** P	no	no	* P	no	no	* P	no	no	no	no	no	2.2	1.9	no
Potential Injury to Self	* P	no	* P	no	no	no	no	* P	no	no	no	no	no	no	no	no	2.5	2.1	no
Potential Injury to Others	no	no	no	no	no	no	no	no	no	no	no	* P	no	no	no	no	1.2	1.1	no
Independence in Eating	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	1.4	1.5	no
Independence in Dressing	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	2.1	2.3	no
Independence in Toileting	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	1.6	1.8	no
Independence in Transferring	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	1.6	1.8	no

* $p<.05$ P represents change in a positive direction.
** $p<.01$ N represents change in a negative direction.
No represents no significant change over time

Representativeness of Sample

Information was collected on all clients who attended an adult day program during a three month period of time (see Chapter 5). In total, 571 clients had attended one of the five day hospitals or nine day support programs. As stated previously, the sample of clients selected from each site to take part in a series of interviews over time comprised 147 clients. A comparison between the sample and the larger group of clients was made to determine the representativeness of the sample to the larger group. For variables measured on an interval level scale, t-test values were calculated. Overall the sample was similar to the total group on most variables.

The variables on which the two groups did not differ significantly included: age, level of education, length of time at current residence, total number of medications, number of prescription medications, number of non-prescription medications, number of days in acute care last year, number of days in long term care facilities last year, number of falls last year, potential injury to self and to others, the number of days and hours in attendance at a day program per week, urinary and bowel management, assistance with eating, ability to transfer, and how often they had phone and face to face contact with family members. However, the groups did vary on a few variables. The mean number of visits to a physician last year was statistically different to those in the sample who averaged 10.8 visits compared to 7.5 in the larger group ($t=-2.9, p<.05$). There was also a significant difference between the two groups on the variable of ineffective coping ($t=3.3, p<.05$). Those in the larger group needed more intervention, averaging 2.9 while those in the sample averaged 2.4. Again, it is important to consider that test-retest reliability was low for this variable. The anticipated length of stay also differed significantly between the two groups, with those in the larger group averaging 9.9 months and those in the sample averaging 5.2 months ($t=4.4, p<.05$). This difference may in part be explained by the fact that the length of stay was reported as ongoing or indefinite for more than half of the clients in the larger group and for more than three-quarters of the sample group. Greater assistance was required by the sample group for dressing ($t=2.6, p>.05$) and toileting ($t=2.3, p<.05$) than the larger group. The sample group averaged 2.4 and 1.9 for dressing and toileting assistance respectively, while the larger group averaged 2.0 and 1.6 respectively. None of these differences were significant at the $p<.01$ level.

Outcome Measures

Outcome measures were completed at the following time intervals for clients in the study. Seven individuals completed a Time 1 measurement (two months before entering the program), 75 completed a Time 2 measurement (just prior to entering the program), 135 a Time 3 measurement (within two weeks of entering the program), 112 a Time 4 measurement (two months after entering the program), and 94 completed a Time 5 measurement which was the final measurement and took place six months after clients entered the program. Reasons for attrition from the study included early withdrawal from the day program (26.4%), acute care hospitalization of the client or caregiver (20.8%), client or caregiver refusal for follow-up (13.2%), long term care facility placement of the client (11.3%), death of the client (9.6%), relocation of the client and/or caregiver (5.8%), and reason unknown (15.1%). In the following section, a description of the results on outcome measures of the characteristics of the group of 147 clients at the time of their first interview is reported. Then changes over time for the group completing the study are discussed. Because of the smaller number of clients at both Time 1 and Time 2, these measurements have been excluded from the repeated measures analysis of variance for all of the outcome measures discussed in the following section. Only those clients who completed Time 3, 4, and 5 interviews were included in the analysis of variance. In this final sample, there were 32 cognitively impaired clients and 58 cognitively intact clients. Scores on the instruments used with both cognitively impaired and cognitively intact clients are discussed separately.

Mental Status

Based on scores of less than eight on the MSQ, 51 (34.7%) of the clients in the total sample were classified as cognitively impaired. The remaining 96 (65.3%) clients who scored eight or more on the MSQ were categorized as cognitively intact. The proportion of cognitively impaired clients in day hospitals was 10.7%, whereas in day support programs the proportion was 49.5%, a significant difference ($\chi^2=23.0$, $p<.01$). In demonstration sites 44.7% of clients were cognitively impaired, while comparison sites had a significantly lower percentage of cognitively impaired clients at 23.9% ($\chi^2=7.0$, $p<.01$). Rural sites also had a higher percentage of cognitively impaired clients (51.7%) than urban sites (23.0%) ($\chi^2=12.9$, $p<.01$). A higher proportion of clients in day programs situated in acute care institutions were competent (90.9%) compared to those in programs situated in freestanding and long term care facilities (54.9% and 53.8%, respectively) ($\chi^2=18.2$, $p<.01$). There were no differences in the likelihood of being cognitively impaired on the basis of age group, living situation, level of education, gender, or marital status. The scores of cognitively impaired clients completing the study ranged from zero to seven and decreased slightly over time from 4.9 at Time 3 to 4.1 at Time 5. This difference was not statistically significant, perhaps due to insufficient power (0.33). There were no interaction effects between time and model of care, geographical location, or program type. Neither were there any across gender, age groups, level of education, living situation, or marital status. Scores for the group of cognitively intact clients averaged 9.1 at Time 3, 9.2 at Time 4, and 9.2 at Time 5, a non-significant difference. As well, with the group of cognitively intact clients, there were no significant differences over time on the basis of model of care, (see Table 6.23), program type, geographical location, or by any of the demographic variables.

Table 6.23 MSQ Scores by Model of Care

Cognitive Status	Model of Care	Time 3	Time 4	Time 5	F	Significance
		Mean				
Cognitively Intact	Day Hospital	9.3	9.2	9.0	2.43	p=.09
	Day Support	9.1	9.2	9.3		
	Total	**9.1**	**9.2**	**9.2**	**0.24**	**p=.79**
Cognitively Impaired	Day Hospital	4.9	4.1	4.2	2.04	p=.15
	Day Support	5.0	5.6	3.8		
	Total	**4.9**	**4.5**	**4.1**	**1.66**	**p=.20**

Functional Status

Scores on the OARS instrument averaged 27.5 and ranged from 18 to 39 for cognitively impaired clients, with average scores of 16.9 on the instrumental activities subscale and 10.7 on the physical activities subscale. Higher scores on this instrument represent lesser levels of independence. Average scores on the physical functional subscale were considerably lower than those on the instrumental subscale for cognitively impaired clients. This was not unexpected as cognitively impaired clients would be less able to manage some of the instrumental activities of daily living such as grocery shopping, managing money, or using the telephone. Overall OARS scores did not differ on the basis of model of care, program type, or geographical location, nor did they differ by any of the demographic variables. On the physical subscale the only difference was between genders, with female clients having higher scores (11.6) than male clients (9.9) ($F=3.9$, $p<.05$). There were no differences between groups on the instrumental subscale.

When the OARS scores of cognitively impaired clients completing the study were examined across time, scores increased slightly, from 26.6 at Time 3 to 27.1 at Time 5, a non-significant difference. There were no interaction effects with time and model of care (see Table 6.24) or geographical location. There was, however, an interaction effect between program type and functional status scores (see Table 6.25). No interaction effects between time and age, gender, living situation, marital status, or level of education for functional status scores were noted. Instrumental functional status subscale scores over time ranged from

16.9 at Time 3 to 17.3 at Time 5, while physical functional status subscale scores increased slightly from 10.4 to 10.9, both non-significant differences. There were no interaction effects between time and gender, age, presence of caregiver, living situation, marital status, or level of education for the instrumental function subscale. Neither were there any interaction effects between time and model of care, geographical location, or program type. Physical functional status scores did not interact with time for any of the above either.

Table 6.24 Functional Status Scores of Cognitively Impaired Clients by Model of Care by Time

Model of Care	Time 3	Time 4	Time 5	F	Significance
	Mean				
Day Hospital	26.2	26.3	26.5	0.61	p=.55
Day Support	28.4	29.6	30.6		
Total	**26.6**	**26.8**	**27.1**	**0.39**	**p=.68**

Table 6.25 Functional Status Scores of Cognitively Impaired Clients by Program Type by Time

Program Type	Time 3	Time 4	Time 5	F	Significance
	Mean				
Demonstration Sites	25.8	26.7	27.7	3.49	*p<.05
Comparison Sites	27.6	27.1	26.2		
Total	**26.6**	**26.8**	**27.1**	**0.39**	**p=.68**

The average total OARS score at the time of the first interview for cognitively intact clients in this study was 22.6 and scores ranged from 14 to 37. There were no differences in OARS scores on the basis of model of care, program type, or geographical location. However, there were significant differences based on a number of demographic variables. Those who lived alone (18.8) had significantly lower scores than did those who lived with someone else (24.1) (F=20.8, p<.01). Men (24.0) had higher average scores than women (21.3) at the time of the first interview (F=5.8, p<.05). As well, those who were married (23.8) had higher scores at the time of the first visit than did those who were not married (21.0) (F=6.3, p<.05). Scores of those in the 65 to 74 year old age group were significantly lower than those in either the less than 50 year old age group or the 50 to 64 year old age group (F=5.7, p<.01). There were no differences, however, in scores by level of education.

Scores on the physical functional status subscale averaged 9.5 and ranged from seven to 19 for cognitively intact clients. At the time of the first interview there no differences in physical function status scores on the basis of model of care, geographical location, gender, marital status, or level of education. However, those in comparison sites (10.0) had higher scores than those at demonstration sites (8.8) (F=4.2, p<.05). The average scores of clients in the youngest two age groups, those less than 50 years and 50 to

64 years old, were 11.9 and 11.6 respectively, while those in the two older age groups averaged 8.8 (65 to 74 years) and 9.0 (75 or over). There were significant differences between both of the younger age groups and both of the older two age groups (F=6.2, p<.01). As one might expect clients who lived alone had lower average scores (8.1) than those who lived with someone (10.4).

The scores of cognitively intact clients on the instrumental functional status subscale averaged 13.0, a few points lower than the average for cognitively impaired clients. There were no differences on instrumental functional status scores on the basis of program type, model of care, or geographical location, nor by educational level. There were differences by gender, with men (14.1) having higher average scores than women (12.0) (F=10.5, p<.01) and by marital status, with married clients (13.8) having higher average scores than unmarried clients (12.0) (F=7.5, p<.01). As well, there was a difference by age group, with those who were 65 to 74 years of age having lower scores than those in the 75 and older group and the 50 to 64 year old group (F=4.9, p<.01). Clients who lived alone had average scores of 13.9, while those who lived with someone averaged 10.7 (F=22.2, p<.01).

For cognitively intact clients completing the study, scores on the OARS instrument ranged from 14 to 37. When examined over time, scores increased slightly from 21.5 to 22.1 from Time 3 to Time 5, a non-significant difference. There were no interaction effects between time and program type, geographical location, living situation, age, or marital status in total scores on OARS. However, there was an interaction effect between time and model of care (see Table 6.26). As well, there were interaction effects for OARS scores between time and education and gender (see Tables 6.27 and 6.28). Scores on the physical and instrumental subscales for cognitively intact clients ranged from seven to 18. Physical function scores increased slightly from 9.2 to 9.4 from Time 3 to Time 5, while instrumental function scores increased slightly from 12.1 to 12.6, again both non-significant differences. The scores of cognitively intact clients in day hospital and day support programs scores on its two subscales were examined across time, and an interaction effect was observed (see Table 6.29). There were no interaction effects between time and age, living situation, marital status, program type, or geographical location for physical function scores. There were interaction effects between time and education and gender (see Tables 6.30 and 6.31). A similar pattern was noted for instrumental functional status scores with interaction effects between time and model of care and education (see Tables 6.32 and 6.33).

Table 6.26 Functional Status Scores of Cognitively Intact Clients by Model of Care by Time

Model of Care	Time 3	Time 4	Time 5	F	Significance
	Mean				
Day Hospital	22.3	22.7	23.8	3.48	*p<.05
Day Support	20.6	20.4	20.3		
Total	**21.5**	**21.6**	**22.1**	**1.54**	**p=.22**

Table 6.27 Functional Status Scores of Cognitively Intact Clients by Education by Time

Level of Education	Time 3	Time 4	Time 5	F	Significance
	Mean				
Grades 1-6	17.8	17.0	17.0	2.71	*p<.05
Grades 7-9	21.2	20.7	20.8		
Grades 10-12	22.9	24.2	24.4		
Post-secondary	20.8	20.0	23.0		
Total	**21.5**	**21.6**	**22.1**	**1.54**	**p=.22**

Table 6.28 Functional Status Scores of Cognitively Intact Clients by Gender by Time

Gender	Time 3	Time 4	Time 5	F	Significance
	Mean				
Male	22.1	22.6	23.8	3.96	*p<.05
Female	21.0	20.7	20.7		
Total	**21.5**	**21.6**	**22.1**	**1.54**	**p=.22**

Table 6.29 Physical Functional Status Scores of Cognitively Intact Clients by Model of Care by Time

Model of Care	Time 3	Time 4	Time 5	F	Significance
	Mean				
Day Hospital	9.9	9.8	10.5	3.42	*p<.05
Day Support	8.6	8.7	8.4		
Total	**9.2**	**9.2**	**9.5**	**0.87**	**p=.42**

Table 6.30 Physical Functional Status Scores of Cognitively Intact Clients by Education by Time

Level of Education	Time 3	Time 4	Time 5	F	Significance
	Mean				
Grades 1-6	7.8	7.5	7.5	2.76	*p<.05
Grades 7-9	8.8	8.7	8.5		
Grades 10-12	10.2	10.5	10.7		
Post-secondary	8.9	9.0	10.6		
Total	**9.2**	**9.2**	**9.5**	**0.87**	**p=.42**

Table 6.31 Physical Functional Status Scores of Cognitively Intact Clients by Gender by Time

Gender	Time 3	Time 4	Time 5	F	Significance
	Mean				
Male	9.3	9.4	10.1	2.76	*p<.05
Female	9.2	9.2	9.0		
Total	**9.2**	**9.2**	**9.5**	**0.87**	**p=.42**

Table 6.32 Instrumental Functional Status Scores of Cognitively Intact Clients by Model of Care by Time

Model of Care	Time 3	Time 4	Time 5	F	Significance
	Mean				
Day Hospital	12.1	12.9	13.3	3.42	*p<.05
Day Support	12.0	11.8	11.9		
Total	**12.1**	**12.3**	**12.6**	**1.74**	**p=.18**

Table 6.33 Instrumental Functional Status Scores of Cognitively Intact Clients by Education by Time

Level of Education	Time 3	Time 4	Time 5	F	Significance
	Mean				
Grades 1-6	10.0	9.5	9.5	2.19	*p<.05
Grades 7-9	12.3	12.1	12.3		
Grades 10-12	12.3	13.7	13.7		
Post-secondary	11.9	11.0	12.4		
Total	**12.1**	**12.3**	**12.6**	**1.74**	**p=.18**

Memory and Behavior Problems Checklist

The average score on the Memory and Behavior Problems Checklist for all of the incompetent clients was 51.5 and ranged from 10 to 133. There were no differences in scores on the checklist on the basis of program type, model of care, geographical location, gender, educational level, age, marital status, or living situation. Although there were no significant differences over time for the group as a whole, there was a trend toward increasing scores over time which suggests that the memory and behavior problems of clients increased in number and/or frequency over the period of the study (see Table 6.34). When examined by model of care, an interaction with time was found (see Table 6.34). There were no interaction effects between time and geographical location or program type, or with gender, age, living situation, marital status, or level of education. These scores were similar to those found in a sample of caregivers of dementia patients who were in either a treatment or control group. Scores of those in the support group (n=44) were 55.3 pre-treatment and 57.3 post-treatment; those who received individual and family counselling scored 51.7 pre and 47.3 post; and those in the control group whose scores were compared at the same time intervals were 57.7 and 56.8 (Zarit, Anthony, & Boutsells, 1987).

Table 6.34 Memory and Behavior Checklist Scores of Cognitively Impaired Clients by Model of Care by Time

Model of Care	Time 3	Time 4	Time 5	F	Significance
	Mean				
Day Hospital	59.2	60.4	62.2	4.03	*p<.05
Day Support	59.6	62.4	83.8		
Total	**59.2**	**60.7**	**65.8**	**2.20**	**p=.12**

Quality of Life

Self-Anchoring Striving Scale

The average score on the current quality of life component of SASS for this group of cognitively intact clients was 5.0 and ranged from 0 to 10. Those in day support programs had higher current quality of life scores than those in day hospital programs, 5.5 and 4.6, respectively (F=4.1, p<.05). As well, urban clients who averaged 4.7, had lower scores than rural clients who averaged 5.8 (F=5.0, p<.05). No differences were noted between demonstration and comparison site clients. However, there was a significant difference in the scores of those who were in the completion of grade 10 to 12 category (5.6) and those who were in the completion of grades 1 to 6 group (3.3) (F=2.5, p<.05). There were no differences in current quality of life scores by marital status, presence of caregiver, age group, gender, or living situation. Scores for the quality of life next year component of SASS averaged 6.2. Scores for clients in the last year of life averaged 5.4, while in the best year they averaged 9.2. In this study, current quality of life scores were of most interest.

When SASS scores for current quality of life were examined over time it was found that they increased slightly from 5.5 at Time 3 to 5.8 at Time 5, a non-significant difference (see Table 6.35). No interaction effects between time and model of care, geographical location, program type, marital status, level of education, age, living situation, or gender were found. These quality of life scores were comparable to those found for a group of 20 patients with severe osteoarthritis who averaged 5.2. Compared to a probability sample of 359 individuals aged 65 years or older in the United States whose scores averaged 6.5, the scores for this group were as might be expected a bit lower (Cantril, 1965).

Table 6.35 Quality of Life Now of Cognitively Intact Clients by Model of Care by Time

Model of Care	Time 3	Time 4	Time 5	F	Significance
	Mean				
Day Hospital	5.4	5.8	5.5	0.38	p=.68
Day Support	5.5	5.8	5.9		
Total	**5.5**	**5.7**	**5.8**	**0.92**	**p=.47**

Index of Well-Being

Scores on the IWB for the total group averaged 8.4 out of a possible high of 14.7 and ranged from 4.2 to 12.5. Scores did not differ on the basis of educational level, age group, living situation, or gender. Those who were not married had significantly higher scores (9.0) than those who were married (7.8) (F=8.1, p<.01). For the group of cognitively intact clients completing this instrument at Times 3, 4, and 5, a small gradual increase in scores over time for the group as a whole from 8.8 at Time 3 to 9.4 at Time 5 was noted (see Table 6.36). This difference was not statistically significant, which may have been as a result of insufficient power (0.43). There were no interaction effects with time and program type, geographical location, or model of care. The only demographic variable for which an interaction effect was noted was gender (see Table 6.37). Scores for a national probability sample of 2,160 Americans averaged 11.8, somewhat higher than the average scores for this group.

Table 6.36 Index of Well-Being of Cognitively Intact Clients by Model of Care by Time

Model of Care	Time 3	Time 4	Time 5	F	Significance
	Mean				
Day Hospital	9.0	9.4	9.5	0.03	p=.97
Day Support	8.6	9.2	9.2		
Total	**8.8**	**9.3**	**9.4**	**2.30**	**p=.11**

Table 6.37 Index of Well-Being of Cognitively Intact Clients by Gender by Time

Gender	Time 3	Time 4	Time 5	F	Significance
	Mean				
Male	8.3	9.7	9.2	3.91	*p<.05
Female	9.1	8.9	9.5		
Total	**8.8**	**9.3**	**9.4**	**2.3**	**p=.11**

Quality of Life Index

The QOL Index scores for cognitively intact clients who took part in the study averaged 6.0 at the time of their first interview, scores ranging from two to 10. There were no significant differences in average scores when examined by marital status, gender, living situation, age groups, or level of education. For competent clients completing the study, QOL Index scores averaged 6.8 overall and scores ranged from two to 10. There was a gradual increase in scores from 6.7 at Time 3 to 7.1 at Time 5. This difference approached statistical significance (F=2.8, p=.07), power (0.54) again being insufficient to be confident that this difference was truly non-significant (see Table 6.38). The only interaction effect noted was between time and program type (see Table 6.39). Quality of Life Index scores for a group of 108 chronically ill individuals, aged 20-70 years, averaged 7.3 (Spitzer et al., 1981).

Table 6.38 Quality of Life Index of Cognitively Intact Clients by Model of Care by Time

Model of Care	**Time 3**	**Time 4**	**Time 5**	**F**	**Significance**
	Mean				
Day Hospital	6.9	7.3	7.1	2.58	p=.08
Day Support	6.5	6.5	7.2		
Total	**6.7**	**6.9**	**7.1**	**2.79**	**p=.07**

Table 6.39 Quality of Life Index of Cognitively Intact Clients by Program Type by Time

Program Type	**Time 3**	**Time 4**	**Time 5**	**F**	**Significance**
	Mean				
Demonstration Sites	6.2	7	7.1	4.53	*p<.05
Comparison Sites	7.1	6.8	7.2		
Total	**6.7**	**6.9**	**7.1**	**2.79**	**p=.07**

Through attending an adult day program a number of clients seemed to gather a different perception of their own quality of life. "It was in talking to them [other clients] you realized how fortunate you are yourself." Another stated, "We always complain how bad we are off. When you see how other people are off, we are very, very lucky." Finally, another client commented that at the adult day program, "I have an occasional chance to lend a helping hand to somebody who is more disabled than I am. It always makes me feel good." For some clients attending an adult day program helped them achieve a more positive outlook on life.

Perceived Health Status

Cognitively intact clients were asked to rate their current health, as well as their health five years ago, from 1 (excellent) to 5 (poor). The average health status reported currently was 3.9 falling into the "fair" range. Average health scores were examined for four groups of living arrangements--those who lived alone, those who lived with their spouse, those who lived with other family members, and those who had alternate living arrangements. Those who lived with their spouse rated their health higher than those who lived in alternate family arrangements (F=3.2, p<.05). There were no differences in perceived health scores on the basis of model of care, program type, geographic location, level of competency, age, gender, level of education, or marital status. Health status five years ago averaged 2.9 for this group of cognitively intact clients, a score which represented 'good' health. Average past health scores did not differ according to gender, marital status, living arrangements, age groups, or level of education.

Current health status scores for the group completing the study ranged from one (excellent) to five (poor). Scores were relatively stable across time for this variable ranging from 3.7 at Time 3 to 3.6 at Time 5. There were no interaction effects between time and the demographic variables of age, gender, marital status, level of education, or living situation or between time and program type, geographical location, and model of care for the current health status (see Table 6.40).

Table 6.40 Health Status Now of Cognitively Intact Clients by Model of Care by Time

Model of Care	**Time 3**	**Time 4**	**Time 5**	**F**	**Significance**
	Mean				
Day Hospital	3.8	3.5	3.6	1.25	p=29
Day Support	3.7	3.7	3.5		
Total	**3.7**	**3.6**	**3.6**	**0.94**	**p=39**

Although there were no significant changes in perceived health status according to the scale, some clients expressed a change in health status that they attributed to their attendance at a day program. As one client stated, "I get more energy. I can eat a little bit better and I can sleep better and walk a little faster and run [chuckles], walk uptown better." Another client who reported initial scepticism about attending a day program made the following comment, "I had my doubts, but actually it was quite effective. I have to say that it was effective so that I was able to get around with a walker instead of by wheelchair . . . I got so that I could drive my car again." Another client stated, "I really felt good after the exercise. You know, you just felt like you could go, you know, just jump up and go."

Feelings about Institutionalization

Clients were asked to indicate whether or not their caregivers approved of their entering a long term care facility at this time. Scores could range from one (strongly disapprove) to seven (strongly approve). On average clients who took part in the study, scored 3.1 which indicated that they believed, on average, that their caregivers somewhat disapproved of their entering a long term care facility. There were no differences in clients' ratings of their caregivers' feelings about institutionalization by program type, model of care, or geographical location, or on any of the demographic variables. There were no differences over time between the clients' rating of their caregivers' perceptions on the basis of model of care, program type, or geographical location, nor on any of the demographic variables.

Clients were also asked to indicate whether or not they themselves approved of entering a long term care facility at this time. Scores on this question were lower, averaging 2.1 which represents fairly strong disapproval of entering a long term care facility. There were no differences on the basis of model of care, program type, geographical location, or on any of the demographic variables. Clients in day programs physically situated in long term care institutions had slightly higher scores, averaging 2.6, followed by those in freestanding programs (2.5), and those in acute care (2.2), but these differences were not statistically significant. Again, over time their were no differences for any of the demographic variables, or on the basis of model of care, program type, geographical location, or physical setting.

It was interesting to note that clients' perceptions about their caregivers' thoughts on institutionalization for the client were very close to those reported by caregivers, averaging 3.1 and 3.2, respectively. However, clients rated their approval of entering a long term care institution lower. It would appear that clients recognized that their being in the home placed additional stress on their informal caregivers. Despite this, most wished to remain in the community for as long as possible.

Social Support

The Social Relationship Scale was administered to cognitively intact clients at Time 5. As part of this questionnaire, clients were asked to identify the people with whom they would discuss family, social, work-related, financial, societal, and health issues. The number of persons identified ranged from two individuals who only had one person in their network to one client who named 64 persons. The mean was 7.3. Although day hospital clients reported more people in their network, it was not a significant difference, neither were there significant differences on the basis of geographical location or program type (see Table 6.41). There were no significant differences on this variable when examined across age groups, gender, levels of education, living situation, or marital status.

Table 6.41 Quantity and Quality of Social Support of Cognitively Intact Clients by Model of Care

	Day Hospital	Day Support	t-value	Significance
Mean Number of Persons in Network	6.0	8.6	-1.16	p=.25
Average Quality of Support Network	1.9	1.8	-0.41	p=.68

For each individual identified by the client as part of their social network, clients were asked to rate the helpfulness of discussing issues (health, financial, societal, etc.). Scores on the quality of the support system could range from -3 (not helpful at all) to +3 (helpful all the time). In this study, the average scores of cognitively intact clients was 1.8 indicating that they believed most of the people in their social network were helpful and supportive most of the time. There were no significant differences in scores on the basis of marital status, living situation, gender, level of education, or age group. There was a difference in average scores between the oldest (75 or older) and youngest groups (less than 50 years old) where these had lower scores than the two middle age groups, but these differences were not significant (F=2.5, p=.07).

Satisfaction with Day Program Scale

The Satisfaction with Day Program Scale was administered at Times 3, 4, and 5 to competent clients. At the time of their first interview, scores on the satisfaction with day program scale averaged 29.0 and figures ranged from 23.3 to 35.5. There were no differences in satisfaction scores by clients on the basis of model of care, program type, geographical location, or on the demographic variables of marital status, educational level, gender, living situation, or age. Scores increased slightly over time from 29.2 at Time 3 to 29.5 at Time 4 and 29.8 at Time 5. This difference was not significant. There were no interaction effects between time and gender, age, marital status, education, living situation or between time and geographical location and model of care (see Table 6.42). Interaction effects were noted between time and program type (see Table 6.43).

Table 6.42 Day Program Satisfaction Scores of Cognitively Intact Clients by Model of Care by Time

Model of Care	Time 3	Time 4	Time 5	F	Significance
	Mean				
Day Hospital	29.0	29.9	29.5	1.4	p=.28
Day Support	29.4	29.1	30.0		
Total	**29.2**	**29.5**	**29.8**	**0.95**	**p=.39**

Table 6.43 Day Program Satisfaction Scores of Cognitively Intact Clients by Program Type by Time

Program Type	Time 3	Time 4	Time 5	F	Significance
	Mean				
Demonstration Sites	28.9	29.7	30.9	5.80	**p<.01
Comparison Sites	29.4	29.4	28.8		
Total	**29.2**	**29.5**	**29.8**	**0.95**	**p=.39**

Competent clients were also asked to state what they liked best and what they liked least about day programs. The opportunity to socialize was noted by 33.7% of clients as what they liked best about day programs. A considerable number of others indicated that they liked the physical therapy (19.8%) and staff support (16.8%). Other characteristics of the program that clients liked best are compared by model of care in Figure 6.6. Over 40% could not identify anything they disliked about the program. The most frequent complaint (20.2%) was not liking to take part in a specific activity. However this varied from client to client, with several indicating they were not anxious to participate in crafts, baking, or exercise groups. Boredom, empty time, or not enough activities was mentioned by 9.2% of clients. Transportation issues were also mentioned by several clients (5.2%). A complete list is included in Figure 6.7. The things that clients liked best about day programs were quite similar to those that caregivers reported (see Figure 6.8). Both thought client stimulation/socialization and the positive effect on the client in terms of health and well-being were important benefits to attendance. Respite was reported by a number of caregivers as what they liked best about day programs, however this was not usually the first response of clients. Dislikes of caregivers and clients are contrasted in Figure 6.9.

Figure 6.6 Features Clients Liked About Programs by Model of Care

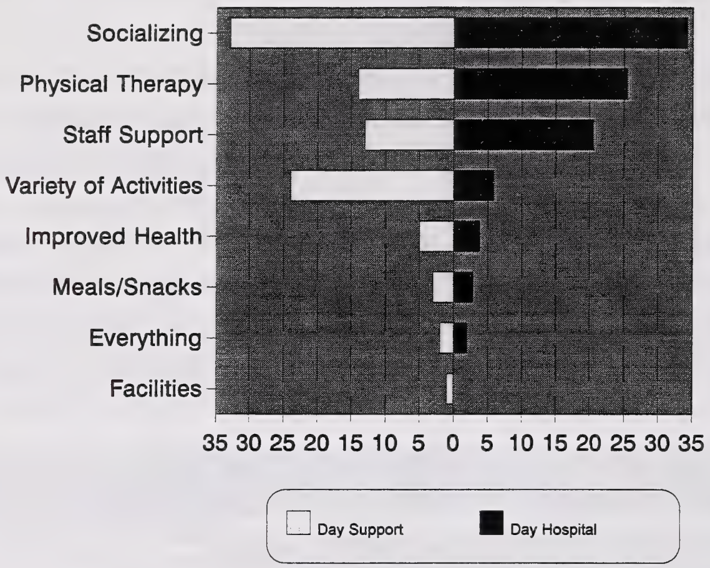


Figure 6.7 Features Clients Liked Least About Programs by Model of Care

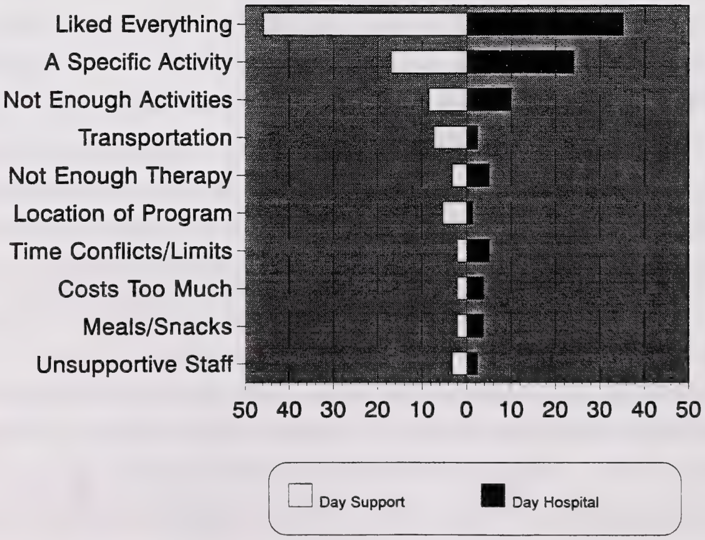


Figure 6.8 Features Clients and Caregivers Liked About Programs

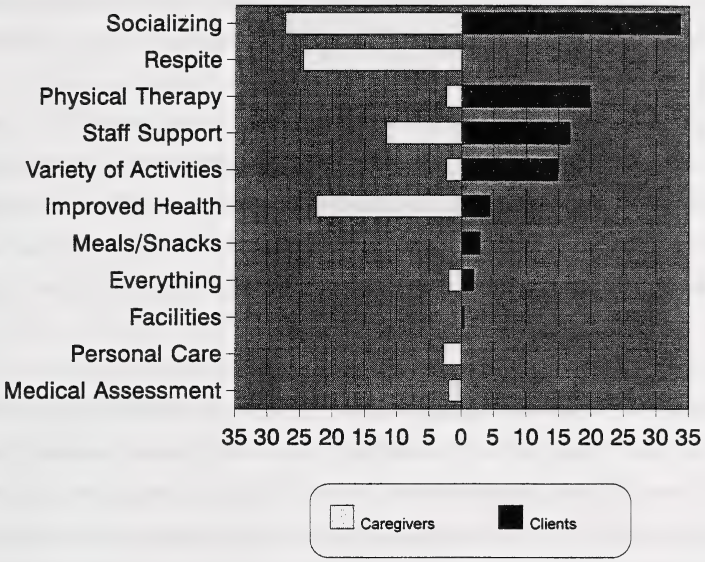
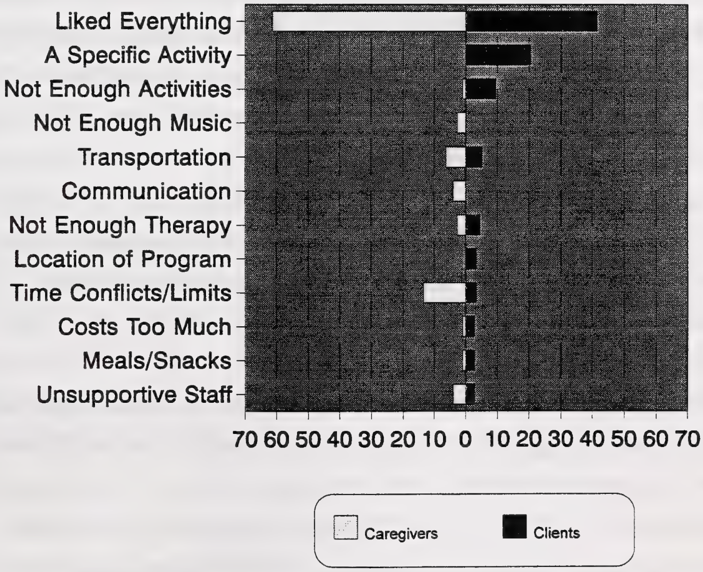


Figure 6.9 Features Clients and Caregivers Liked Least About Programs



Overall, clients were quite satisfied with the programs that they attended. As one client put it "you can laugh and enjoy . . . and so the whole thing is, it's an uplifting day when you go over there". Another client confessed, "it seemed the more I went the more I wanted to go". The program seemed to be meeting some of the clients' needs for support and socialization, as evidenced through statements such as "Well, I think, I can't explain this lovely feeling I have. One day a week is enough, but all the following week I look forward to my next time there with them. I know I'll have good fellowship. . . . It always makes me feel good," and "Well, I would say the friendliness and the service I think gave, made you feel important." Another stated, "once you're not able to get out in society, you know, functioning work-wise or whatever, I think it's a real need to get out and socialize with other people and sometimes just verbally sharing has a lot to offer." Finally, one client succinctly captured the essence of the importance of socialization for to her when she said simply "we need friendship."

Many of the clients enjoyed the exercises at the program and found them to be beneficial. One client stated, "they give you something to do every, you know, you're there and they give you exercises which you don't normally take and they're really good." Another client when asked what they liked best about the program replied "we exercise, that's for sure. I know doing exercise is very good for me." "There was the exercises which I enjoyed every day when I had them." Many of the clients had never been involved in a regular exercise program and were learning the benefits of such activity.

The self-esteem of some clients was also enhanced through their attendance at an adult day program. Clients were proud of their achievements. As one client stated, "I mean, I'm amazed that I was able to make a scarf. I gave it to my daughter for Christmas and she was just flabbergasted that I had done it." Another suggested that "it's [attending the day program] given me confidence in the fact that I had given up the writing and now was getting into something else, and that I needed . . . you need to keep busy and you need to keep positive." When describing what the program meant to her, one client stated "it gets us more interested, makes us feel that we can still do a lot of things and it's such fun having a project that we all work together on." Staff also provided clients with positive reinforcement and complements. One man talked about an incident when he was quite elated because a staff member said to him "Oh, gosh. You're the best hunk of a man I've had around me for a long time."

Clients made a lot of comments about the staff at day programs. One client commented that to be a staff member at a day program "you've got to be bright and cheerful and even if you think that I'm an idiot, you have to accept me and get me going in the right direction." Other clients talked about the "warmth and the friendship and the affection" of staff and their kindness and consideration. "I was impressed with the friendliness and cooperation of the nurses. . . . They were cheerful and very pleasant." “It's really fun talking to them individually as well as the group chats that we have", another client commented. Some clients talked about their relationship with a specific staff member. For example, one client stated "she's a very special person, so that I can talk with her without any embarrassment or without any worrying about offending her. I mean, I can be funny or I can be dull or I can, whatever I'm going to be doing she can always snap me out of it."

As was noted earlier, many clients had no suggestions for improving day support programs. A few were able to provide some areas for improvement. One of these areas revolved around transportation. Some of the negative comments clients made about transportation to day programs included: "Well, it's such a distance to drive" and "the cost of the bus, twenty bucks a ride!". Another client when asked if there was anything about the program they did not like responded: "Not really, no. I could complain a little bit about the bus, I guess. . . . it's a little bit rough". Others were satisfied with the transportation and were particularly pleased when transportation was arranged for them as reflected in the following comments: "I was really happy to get transportation from here to Lethbridge"; and "They came and picked me up here themselves with their own vans, you know. So they were pretty good." Clients particularly appreciated the services of a courteous and helpful driver as indicated by comments such as "our driver was very helpful in getting me into the, from my home into the handi-bus and to bring me back."

Several of the clients comments related to the structure and organization of the day program. "There were times when I felt that maybe it could have been organized a little better" stated one client. This client went further to describe situations in which time had been "wasted", and clients were sitting idle. Other clients spent this free time "talking with the people". Another disliked disruptions to the program as indicated in his response "instead of having coffee and toast and a little time for chit chat, they changed that all around. No coffee at all. They started right with the program and then served coffee at ten thirty. Well, that didn't suit me at all."

A few seniors perceived some of the activities they participated in as more suitable for children. As one client stated, "Well, it wasn't so hard, but I thought, gracious, me at my age standing and kicking a beach ball?" Another replied, "I did feel that I was treated as . . . that it was a glorified babysitting service." Others disliked certain activities. For instance, one client stated: "They had a relaxation group and I just went once and I didn't like it because I couldn't relax my neck, I couldn't relax sitting straight up." One of the younger clients did not feel that he fit well in the program due to the difference in age between himself and most of the other clients as reflected in his statement: "I mean, it's kind of hard for me to be on their wavelength." He further clarified his concern when he stated "I'm afraid that if I get too involved with them [older people], it works on my emotions too and I will become older and talk and act older than what I am."

Clients also perceived that the program was helpful for their caregivers. "It gives her a break from me" one client reported, while another commented "I think it probably gave her a little bit of time to be by herself without me there to cause things that would, well, I think some of them would annoy me". Another client in talking about their caregiver stated, "When, I go they're free to do what they want, like at least to get out." "I had a feeling it gave G. [caregiver] the time to relax a little, because I'm constant care", another client stated.

SUMMARY STATEMENT

The clients who completed the study were generally representative of clients in adult day programs. Although there were few significant improvements noted in their health status, functional status, and overall quality of life over the course of the study, this result is not unexpected in a group of elderly, frail individuals. Indeed, the finding that they were able to maintain their current health and functional status can be interpreted as success. In Table 6.44, a summary of changes in the outcome measure variables over time for cognitively impaired clients is provided. A similar summary for outcome measures used with cognitively intact clients is presented in Table 6.45. Without the intervention of the day program, it is possible that their health and functional status and quality of life might have deteriorated over the study period with a need for entry to a more sheltered living and care arrangement. The overall high levels of satisfaction of clients with day programs lends further support to this conclusion as clients viewed the programs as positive for them in terms of health and social support.

Table 6.44 Cognitively Impaired Clients--Outcome Measures Changes Over Time

Variable	Model of Care		Geographic Location	Program Type		Gender	Married		Age	Lives Alone	Level of Education	Total Group			
	Day Hospital	Day Support		Comparison	Demonstration		Yes	No				Time 1	Time 2	Time 3	Significant Difference
Mental Status	no	no	no	no	no	no	no	no	no	no	no	4.9	4.5	4.1	no
Functional Status	no	no	no	* P	* N	no	no	no	no	no	no	26.6	26.8	27.1	no
Memory and Behavior Checklist	* N	* N	no	no	no	no	no	no	no	no	no	59.2	60.7	65.8	no

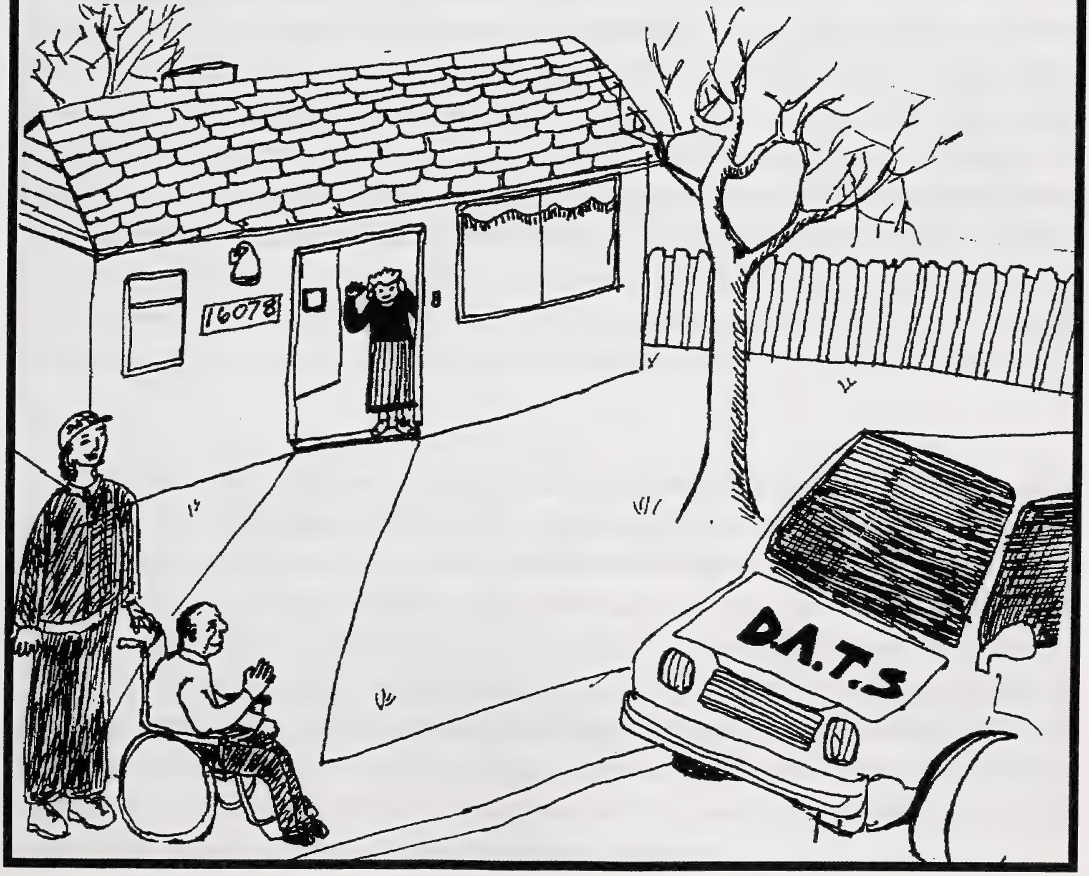
* p<.05 P represents change in a positive direction.
**p<.01 N represents change in a negative direction.
No represents no significant change over time.

Table 6.45 Cognitively Intact Clients--Outcome Measures Changes Over Time

Variable	Model of Care		Geographic Location	Program Type		Gender		Married	Age	Lives Alone	Level of Education				Total Group			
	Day Hospital	Day Support		Comparison	Demonstration	Male	Female				Grade 1-6	Grade 7-9	Grade 10-12	Post Secondary	Time 1	Time 2	Time 3	Significant Difference
Mental Status	no	no	no	no	no	no	no	no	no	no	no	no	no	no	9.1	9.2	9.2	no
Functional Status	* N	* P	no	no	no	* N	* P	no	no	no	* P	* P	* N	* N	21.5	21.6	22.1	no
Self-Anchoring Striving Scale	no	no	no	no	no	no	no	no	no	no	no	no	no	no	5.5	5.7	5.8	no
Index of Well-Being	no	no	no	no	no	* P	* P	no	no	no	no	no	no	no	8.8	9.3	9.4	no
Quality of Life Index	no	no	no	* P	* P	no	no	no	no	no	no	no	no	no	6.7	6.9	7.1	no
Perceived Health Status	no	no	no	no	no	no	no	no	no	no	no	no	no	no	3.7	3.6	3.6	no
Feelings about Institutionalization	no	no	no	no	no	no	no	no	no	no	no	no	no	no	2.4	2.4	2.1	no
Satisfaction with Day Program	no	no	no	** N	** P	no	no	no	no	no	no	no	no	no	29.2	29.5	29.8	no

* $p<.05$ P represents change in a positive direction.
** $p<.01$ N represents change in a negative direction.
No represents no significant change over time.

Chapter 7:
Profile of Selected Informal Caregivers



CHAPTER 7: PROFILE OF SELECTED INFORMAL CAREGIVERS

Determining the impact of adult day programs on informal caregivers of clients was an important purpose in this study. Impact was measured in terms of caregiver burden, quality of life, health status, feelings about institutionalization, and general satisfaction with the day program. In total, 122 different caregivers consented to take part in the study. Seventeen caregivers completed a semi-structured taped interview following the final Time 5 measurement. The number of caregivers with clients in day support programs was 84 (68.9%), while the number of caregivers with clients in day hospitals was 38 (31.1%).

GATHERING THE DATA

Client/caregiver pairs from each of the 14 different adult day programs (five day hospital and nine day support) were asked to participate in the study at the time the client was accepted for admission to the program. A sample size of 10 pairs per site was sought. Due to the small number of clients in some programs this sample size was not attained at all sites. As well, some clients who took part in the study did not have an informal caregiver. Over-sampling at several of the larger programs was used to increase sample size. Program managers or their designates introduced the study to incoming caregivers/clients, and telephone followup was completed by data collectors. An appointment was made to discuss the study in further detail and to obtain informed consent. In most instances caregivers were interviewed in their homes separately from the clients. On occasion, caregivers were interviewed at the program site or at another mutually acceptable location.

Interviews were scheduled to take place at five different time intervals, two months before the client entered the program, just before the client entered the program, within two weeks after the client entered the program, two months after, and 6 months post entry. Therefore Time 1 measurements were only available for those clients/caregivers who were on long waiting lists. Neither Time 1 or Time 2 measurements were available for clients who entered the program on short notice, or in the case of the psychogeriatric population where it was determined by the program directors that an initial assessment of the client's adjustment to the program and suitability for participating in the research should take place prior to the client, and hence the caregiver, being asked to participate in the study. At each time interval, caregivers were asked to complete a number of instruments, as well as some demographic questions.

A purposive sample of 17 caregivers completed a qualitative interview following the Time 5 measurement. Caregivers were selected for interview by the data collectors in consultation with day program staff based on their willingness to share their thoughts on tape and as being representative of the diversity of caregivers. The qualitative sample contained both male and female caregivers of varied ages and with differing relationships to the client, as well as those with both positive and negative experiences with day hospital and day support programs.

THE INSTRUMENTS

Caregiver Burden

The impact of responsibility for the client carried by the caregiver was assessed using the Caregiver Burden Inventory developed by Novak and Guest (1989). Caregivers' expressions of their feelings about the impact of the client's disabilities on their lives were rated for 24 items on a five-point scale. Novak and Guest reported that internal consistency ranged from 0.73 to 0.86 for the five subscales of caregiver burden measured by the instrument (1989). The five subscales included time dependence burden, physical burden, developmental burden, social burden, and emotional burden. In this study, the reliability coefficients (alpha) for the 24 items was 0.92. For each of the five subscales reliability coefficients (alpha) ranged from 0.78 for the social subscale to 0.88 for the developmental subscale. Therefore internal consistency of the scale and subscales was very high in this study. Scores on each of the subscales were significantly correlated with all of the other subscales ($p<.01$). Physical burden and developmental burden were most strongly correlated. These findings were expected as the areas do not represent mutually exclusive categories.

Quality of Life

Two instruments were used to measure the concept of quality of life. These included the Self-Anchoring Striving Scale (Cantril, 1965) and the Index of Well-Being (Campbell et al., 1976).

Self-Anchoring Striving Scale

The SASS asks subjects to rate their current, past, future, and best quality of life on the rungs of a ladder from 0, indicating the worst possible life imaginable to 10, the best possible life imaginable. In a large American study of 2696 individuals, the average score for present quality of life was 6.6 (Cantril, 1965). This scale has been used in at least 13 countries including Canada. The stability reliability for this measure has been reported as 0.79 (Molzahn, 1989).

Index of Well-Being

The IWB was designed for a national survey examining the quality of American life. It is an 11 item seven-point semantic differential scale. Ten items are bipolar adjective pairs (such as boring versus interesting; full versus empty) and the last item is a measure of overall satisfaction with life. Two of the pairs (easy/hard and tied-down/free) are not included in the calculation of scores. The stability reliability on various items over an eight month period was found to range from 0.42 to 0.67 (Campbell et al., 1976). The alpha coefficient for internal consistency was found to be 0.91 (Molzahn, 1989). The alpha coefficient for internal consistency was found to be 0.93 for the caregivers in this study, again a very high coefficient which was entirely consistent with findings in other studies. Scores can range from 2.1 (a very low level of well-being) to 14.7 (very high level of well-being). In a large American sample of 2160 persons, the mean score was found to be 11.8 (Campbell et al., 1976).

Health Status

The perceived health status of the client and the caregiver was assessed by asking for a subjective report of current health and that of five years ago. This method has been used by a number of investigators and has been shown to be a reliable indicator of health status from the person's perspective (Kerr et al., 1982). Because these are both single item measures, it is not possible to calculate internal consistency reliability. In the pilot study, the stability reliability was 0.76 for caregivers current health status and 0.44 for caregiver's previous health status.

Feelings about Institutionalization

Opinions regarding institutionalization were requested of caregivers, and a single question was posed to the caregiver. Questions of this nature have been found to be a reliable measure in other studies where they have been used. In the pilot study, the caregivers' perceptions regarding institutionalization were very stable (r=0.92).

Social Support

To measure social support the Social Relationship Scale developed by McFarlane and colleagues (1981) was used. This tool asks individuals to indicate the number of individuals with whom they would discuss six topics--family, work, money, health, personal concerns, and societal issues. The relationship of the individual to the caregiver was recorded, and caregivers were asked to indicate whether or not discussing the issues with each person was helpful or not helpful on a 7-point Likert scale. As such, this scale provides both a quantitative and qualitative measurement of social support. Test-retest reliability for this instrument was reported by McFarlane and colleagues as ranging from .62 to .99 for the quantitative component (number of individuals in network) and .54

to .94 for the qualitative component (helpfulness rating). This instrument was added to the study after data collection had commenced and was administered only at Time 5, thus it was not possible to calculate test-retest reliability scores.

Satisfaction with Day Program Scale

The Satisfaction with Day Program Scale was administered to both clients and caregivers. This scale consists of seven items that are measured on a five point scale from very unsatisfied to very satisfied and three open-ended questions. In the open-ended questions, caregivers were asked to describe what they liked best about the program, what they liked least, and if they had any other comments. In the pilot study the stability (test-retest) reliability for the caregivers' responses to the scale items was 0.63. Also, the internal consistency reliability of the scale as measured by Cronbach's alpha was 0.63 for the caregivers. It was noted that a number of the caregivers had difficulty completing the scale, because they indicated that they did not know what took place during the time the client attended the program. Many caregivers indicated that clients gave them little feedback about the program. As a result of this feedback, the day program satisfaction scale was modified so that questions were more general in nature. The alpha reliability coefficient for caregivers for the larger study utilizing the modified scale was 0.76.

DESCRIBING THE NATURE OF CAREGIVERS

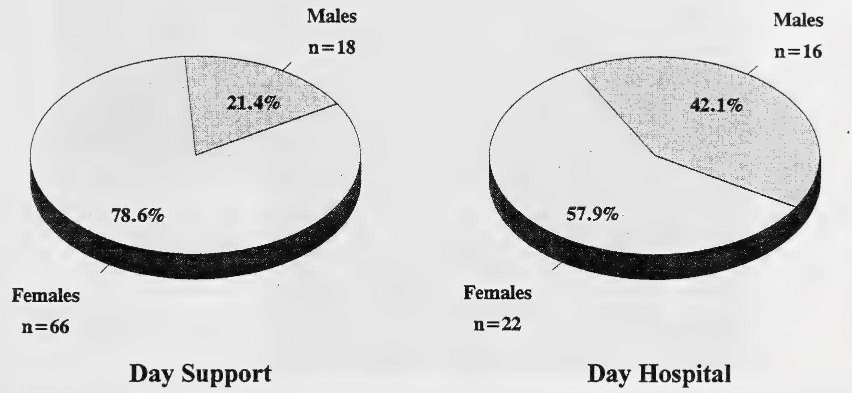
Demographic Information

Information identifying the gender, age, marital status, educational level, and occupation of caregivers was collected at the onset of the study for each caregiver who took part. In this section, comparisons are made between the caregivers of clients in day hospital and day support programs (model of care). As well, differences between the group of 80 (65.6%) caregivers who completed the study and the 42 (34.4%) who did not are reported and differences by type of program (comparison/demonstration) and geographical location (rural/urban) are included as separate sections. Of the 122 caregivers who took part in the study, there were 54 (44.3%) clients in rural programs and 68 (55.7%) in urban programs. There was a similar breakdown by program type, with the number in demonstration site programs totalling 69 (56.6%) and in comparison site programs the figure was 53 (43.5%).

Gender of Caregivers

As expected, the majority (72.1%) of caregivers were female. The percentage of female caregivers of clients in day support programs was 78.6%, while in day hospital programs this figure was 57.9% (see Figure 7.1) ($\times^2$=5.6, p<.05).

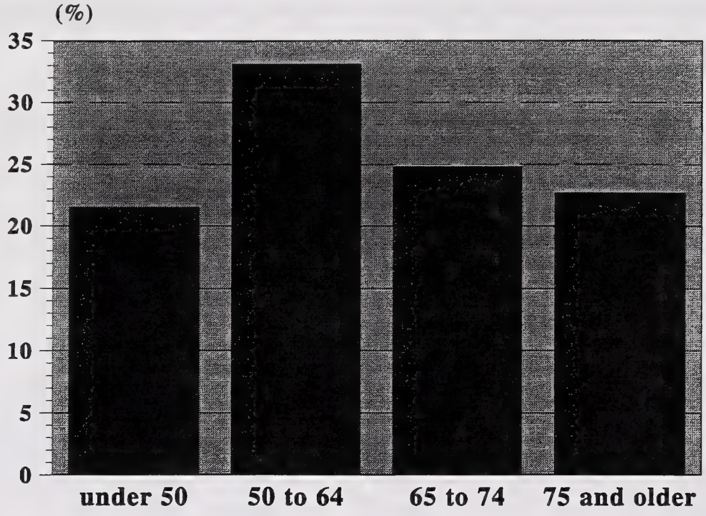
Figure 7.1. Gender of Caregivers by Model of Care



Age of Caregivers

The average age of the 122 caregivers who participated in the study was 61.6 and ranged from 31 to 86 years. There was a significant difference between the age of caregivers of clients in day hospitals versus day support programs, with the average age of caregivers of clients in day support programs being 59.9 years, and that of caregivers of clients in day hospital programs being significantly older averaging 65.5 years (F=4.2, p<.05). Although the average age of male caregivers (63.7 years) was somewhat higher than the average age of female caregivers (60.8 years), this was not a significant difference. Age data were regrouped into the following categories, those under 50 years, 50 to 64 years, 65 to 74 years, and 75 or over (see Figure 7.2). The number of caregivers in each group were fairly evenly divided. It is significant to note the large percentage of caregivers who are greater than 75 years who may be at-risk for health problems themselves. No differences were noted in the proportions of men and women who were caregivers across the four age groups.

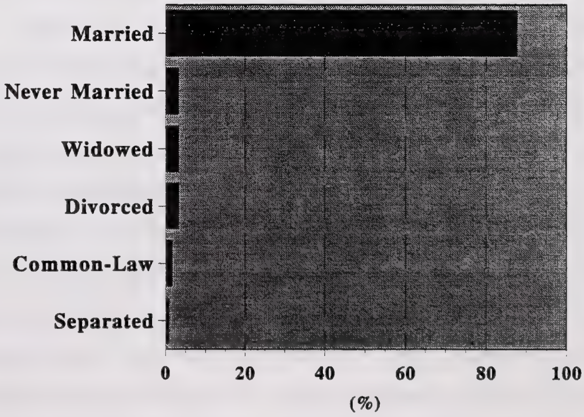
Figure 7.2. Age Groups of Caregivers



Marital Status of Caregivers

Most of the caregivers were currently married (see Figure 7.3). The remainder had either never married, or were widowed, divorced, living common-law, or separated. For the purpose of making comparisons, marital status was collapsed into two categories, married or not currently married. No significant differences in marital status of caregivers were noted by model of care. When examined across age groups, again there were no differences in marital status, neither were there differences in the marital status of men and women.

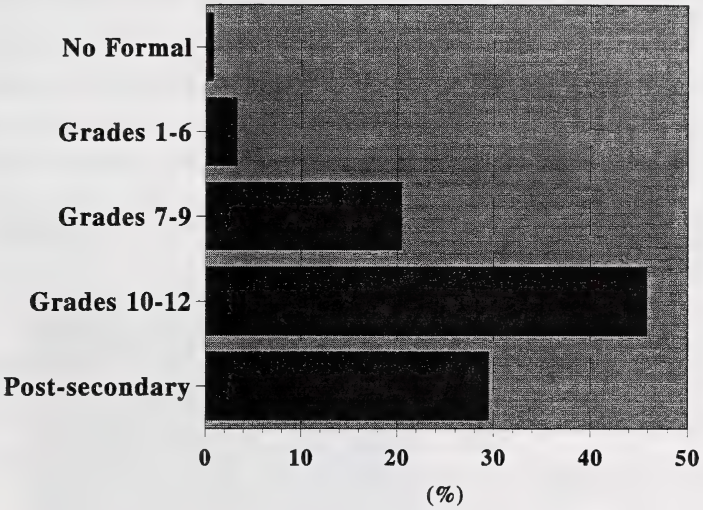
Figure 7.3. Marital Status Of Caregivers



Educational Level of Caregivers

The level of education of caregivers ranged from “no formal” to “post secondary” (see Figure 7.4). Only one individual reported having no formal education and most had completed at least 10 years. There were insufficient numbers to test for significant differences on the basis of model of care, age, gender, or marital status.

Figure 7.4. Education Level Of Caregivers



Occupation of Caregivers

As might be expected in a predominantly female group, many of the caregivers stated that their current or most recent occupation was either homemaking or clerical/sales work (see Table 7.1). Other categories of occupation in decreasing frequency included proprietor/manager, unskilled work, professional, skilled work, semi-professional, semi-skilled work, and farming. There were insufficient numbers in the sample to make meaningful comparisons between the occupations of caregivers on the basis of model of care, gender, age, educational level, or marital status.

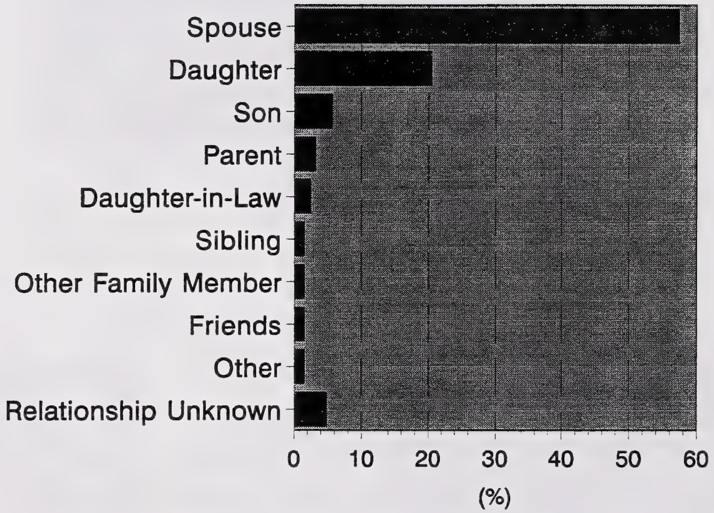
Table 7.1 Occupation of Caregivers (%)

Homemaker	22.3
Clerical/Sales	21.2
Proprietor/Manage	13.2
Unskilled	11.6
Professional	9.1
Skilled	7.4
Semi-professional	5.8
Semi-skilled	5.8
Farming	3.3

Relationship of Caregiver to Client

Caregivers were the spouses of the client in over half of the cases (see Figure 7.5). The next largest group of caregivers was daughters, followed by sons of clients, parents, daughters-in-law, siblings, other family members, friends, or someone else. Women were the primary care providers. Where the caregiver was the spouse of the client, 68.6% of these were women. It has been noted that many of the individuals in this group were also frail, a significant concern given the physical, psychological and social responsibilities involved in caregiving. Those who were daughters and daughters-in-law comprised a significant portion of caregivers. In many situations, these women were balancing their own career and family responsibilities along with the caregiving responsibilities associated with looking after a frail and aging parent. These women are at significant risk for caregiver burnout and attention to their needs may be an important role for day programs.

Figure 7.5. Relationship of Caregiver to Client



Comparison of Demographic Data of Caregivers Who Completed the Study with Those Who Did Not

There were no differences between the group of 80 caregivers who completed the study, and the 42 who did not on the basis of gender or age. Of caregivers who completed the study 93.8% were married, while a lesser number, 81.0% of those who did not complete the study were married

($x^2=4.7$, $p<.05$). While it was suggested in Chapter 6 that spouses of clients might be encouraging clients to continue participation in the study, the opposite may also be true. That is caregivers who are married might be receiving support from clients to continue participation. Although, there were insufficient numbers to test for differences by occupation and educational level between those who completed the study and those who did not, the pattern of responses was similar.

Comparison of Demographic Data of Caregivers of Clients by Model of Care, Program Type, and Geographical Location

The proportion of males and females in demonstration and comparison sites was not significantly different, neither was there a difference on the basis of age group or marital status . Similarly, there were no differences on these variables between rural and urban caregivers. There were two few numbers to compare caregivers in demonstration and comparison sites or rural and urban sites on either educational level or occupation. In Table 7.2, a summary of demographic variables contrasted by model of care is provided. There were no significant differences noted between the adult day hospital and adult day support groups.

Table 7.2 Caregiver Demographic Variables Contrasted by Model of Care

Variable	Significant Difference
Gender	--larger percentage of female caregivers in day support programs than day hospital programs
Age	--on average, caregivers of clients in day hospital programs were 5.5 years older than those with clients in day support programs
Marital Status	--no differences noted --majority in both groups were married
--insufficient numbers in sample to test for differences by educational level, occupation, or relationship of caregiver to client.	

Outcome Measures

Measurements using a variety of instruments were made at predetermined time intervals before and after the client entered the adult day program to determine the impact of day programs on caregivers. Seven caregivers completed a Time 1 measurement (two months before entering the program), 61 a Time 2 measurement (just prior to entering the program), 110 a Time 3 measurement (within two weeks of entering the program), 91 a Time 4 measurement (two months after entering the program), and 80 completed a Time 5 measurement which was the final measurement and took place six months after clients had entered the program. The primary reasons for attrition were reported in Chapter 6, and included death or institutionalization of the client, relocation of the client and/or caregiver, and early withdrawal of the client from the day program. Due to the small numbers in Time 1 and Time 2, these measurements have not been included in any repeated measures analysis. Differences between the group of caregivers who completed the study and those who did not and differences on the basis of program type (comparison/demonstration) and geographical location (rural/urban) are included as separate sections in the following discussion.

Table 7.3 Caregiver Burden

Burden	Range	Mean
Developmental Burden	0-20	10.5
Emotional Burden	0-19	4.5
Physical Burden	0-20	8.6
Time Dependence Burden	0-20	13.0
Social Burden	0-18	6.1
Total	**0-97**	**42.9**

Caregiver Burden

Caregiver burden was measured using the Caregiver Burden Inventory, which has five subscales. For each subscale, scores can range from 0 to 20, and total scores can range from 0 to 100. Scores for this group of 122 caregivers at the time of their first interview averaged 42.9, and ranged from 0 to 97 (see Table 7.3). The scores were normally distributed with a standard deviation of 19.3. Caregiver burden scores in this sample were considerably higher than those noted for a group of 107 caregivers of confused or disoriented older people whose average burden score was 22.13 (Novak & Guest, 1989). As is shown in Table 7.3, caregivers perceived the greatest burden as a result of their caregiving role in the areas of time dependence and developmental burden. For the developmental subscale, caregivers were asked to indicate their level of agreement with statements such as: "I feel I am missing out on life" and "I expected that things would be different at this point in my life." In the time dependence subscale, caregivers were asked to respond to statements such as: "I have to watch my (family member/friend) constantly" and "I don't have a minute's break from my caregiving chores." There was a significant difference between the scores of caregivers who cared for clients in day hospitals and day support programs, with the average caregiver burden score of caregivers with clients in day support programs being higher at 45.6, than the average score of caregivers with clients in day hospitals who averaged 36.8 (F=5.6, p<.05). Caregiver burden scores for caregivers of cognitively impaired clients averaged slightly higher at 44.0, than average scores for caregivers of cognitively intact clients at 40.2. This difference was not statistically significant. No significant differences on the basis of gender, age group, marital status, or level of education on caregiver burden scores at the time of the first interview were noted.

For the group of 80 caregivers who completed the study, there was no significant difference in total caregiver burden scores or scores on any of the five burden subscales over time. Total burden scores decreased slightly over time for both those in day support and day hospital programs (see Table 7.4). Although not significant, the trend was in a positive direction, representing lower total burden for caregivers. There were no significant differences over time in burden scores on the basis of age, gender, marital status, or educational level.

Table 7.4 Total Caregiver Burden (Mean) by Model of Care by Time

Model of Care	Time 3	Time 4	Time 5
Day Hospital	38.5	33.8	36.7
Day Support	45.2	42.4	44.1
Total	**42.7**	**39.5**	**41.7**
	F=1.81, p=.17		

Quality of Life

Self-Anchoring Striving Scale

Caregivers were asked at each interview to complete the four parts of the Self-Anchoring Striving Scale rating their life currently, in the best years of their life, in the last year, and their prediction of their quality of life for the next year. At the time of the first interview, the average score of caregivers on the current quality of life component was 6.1. In the best year of their life, the average score of caregivers was 9.1. The average score on the quality of life last year was 6.1. Caregivers when asked to predict their quality of life in the next year scored on average 6.7. It was interesting to note that on the whole caregivers' predictions for the future were optimistic compared with their ratings for the current and previous years.

The day hospital group had, on average, slightly higher quality of life scores on all four components of SASS at the time of the first interview, and this approached significance on the quality of life next year question (F=3.3, p=.07) (see Table 7.5). As well, men rated their quality of life higher on all four parts of the self-anchoring striving scale instrument, significantly so on the quality of life in the best years of their life component (F=4.7, p<.05) and approaching statistical significance on the quality of life next year question (F=3.2, p=.08) (see Table 7.5). There were no differences across age groups on any of the four parts of the SASS. However, those who were single had significantly higher scores on the quality of life next year question, averaging 8.4 compared to those who were married whose scores averaged 6.5 (F=5.5, p=<.05). There was no difference between levels of education and SASS scores.

Table 7.5 Quality of Life Scores (Mean) by Model of Care and Gender

	Model of Care			Gender		
	Day Hospital	Day Support	Significance	Men	Women	Significance
Current	6.4	6.0	F=0.65 p=.42	6.4	6.0	F=0.85 p=.36
Next Year	7.3	6.4	F=3.29 p=.07	7.4	6.4	F=3.18 p=.08
Best Year	9.3	9.0	F=1.87 p=.17	9.4	9.0	F=4.67 *p<.05
Last Year	6.3	6.0	F=0.21 p=.64	6.6	5.9	F=1.72 p=.19

The average current quality of life score of caregivers who completed the study changed relatively little over time and ranged from 6.3 at Time 3 to 5.9 at Time 5. Quality of life scores of caregivers for the next year of life also remained stable at 6.4 at Time 3, 6.4 at Time 4, and 6.3 at Time 5. When quality of life now and quality of life next year scores were examined over time on the basis of model care (see Table 7.6) and age group, gender, educational level, or marital status, no differences in the average scores were noted.

Table 7.6 Current Quality of Life of Caregivers (Mean) by Model of Care by Time

Model of Care	Time 3	Time 4	Time 5
Day Hospital	6.9	6.6	6.5
Day Support	5.9	5.8	5.6
Total	**6.3**	**6.1**	**5.9**
	F=2.17, p=.12		

Index of Well-Being

Scores on the Index of Well-Being can range from 2.1 (a very low level of well-being) to 14.7 (a very high level of well-being). The average score for caregivers at the time of their first interview was 10.1, and ranged from 2.1 to 14.7. Well-being scores did not vary by model of care or by gender, age group, educational level, or marital status. In the group of caregivers who completed the study, scores did not differ significantly over time, averaging 10.3 at Time 3, 10.3 at Time 4, and slightly lower at 9.9 at Time 5. Neither caregivers who had clients attending day hospital or day support programs showed significant changes in their IWB scores over time (see Table 7.7). There were no significant differences over time for IWB scores for the total group of caregivers or on the basis of age group, gender, marital status, or education.

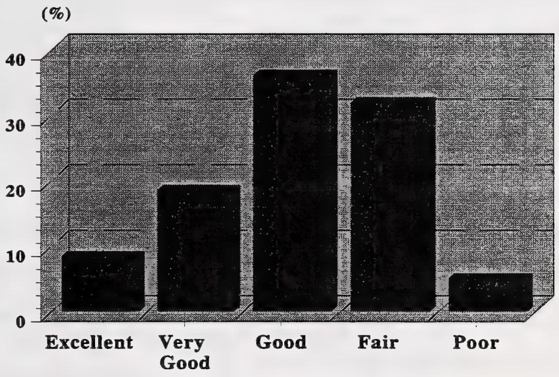
Table 7.7 Index of Well Being Scores (Mean) by Model of Care by Time

Model of Care	Time 3	Time 4	Time 5
Day Hospital	9.9	10.4	10.4
Day Support	10.4	10.3	9.7
Total	**10.3**	**10.3**	**9.9**
	F=1.76, p=.18		

Health Status

Health status was rated from excellent (1) to poor (5). The number of caregivers who at their first interview rated their present health status in each category is reported in Figure 7.6. There was no difference in the present health status of caregivers of clients in day hospital or day support programs. Men, on average, scored 2.6 which was significantly lower indicating better perceived health than the average rating of women (3.2) (F=8.6, p<.01). Current health status did not vary significantly on the basis of age, marital status, or level of education. In the group of caregivers who completed the study there was no significant change in their perception of their present health status over time. The average score for the group was 3.0 at Time 3, 3.1 at Time 4, and 3.0 at Time 5. There were no differences by model of care (see Table 7.8), nor by age, gender, marital status, or educational level.

Figure 7.6 Current Health Status



The proportion of caregivers who rated their health as very good or excellent five years ago was 43.6% compared to 26.9% who currently rated their health in these two categories. The number who rated their health as fair or poor five years ago was 12.9% compared to 36.9% who rated their health in these categories currently. As one might expect, there were no significant differences over time on the previous health status question on the basis of any of the variables. This decrease in perceived health status during the past five years has implications for the long term abilities of caregivers to continue in their caregiving role.

Table 7.8 Current Health Status of Caregivers (Mean) by Model of Care by Time

Model of Care	Time 3	Time 4	Time 5
Day Hospital	3.2	3.2	3.2
Day Support	3.0	3.1	3.0
Total	**3.0**	**3.1**	**3.0**
	F=0.74, p=.48		

Feelings about Institutionalization

Caregivers were asked to indicate on a seven point scale, ranging from very strongly disapprove (1) to very strongly approve (7), how they felt about placing the person they were caring for in a long term care facility at the present time. A substantial number of caregivers very strongly disapproved at the time of their initial interview (see Figure 7.7). The average score was 3.2 for the total group, falling closest to the somewhat disapproved category. There were no differences noted between caregivers' feelings about institutionalization on the basis of caregivers' age, marital status, educational level, or by the model of care attended by the client. As

Figure 7.7. Feelings About Institutionalization

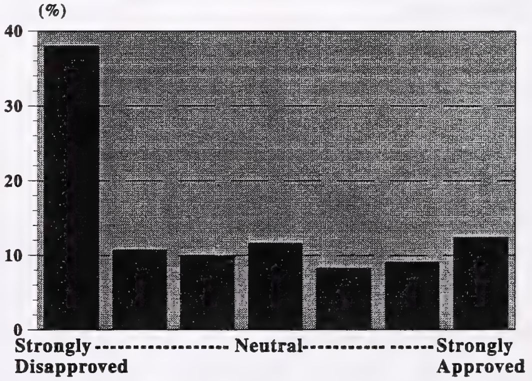


Table 7.9 Feelings About Institutionalization (Mean) by Model of Care by Time

Model of Care	Time 3	Time 4	Time 5
Day Hospital	2.3	2.1	2.4
Day Support	2.8	2.6	2.9
Total	**2.6**	**2.5**	**2.8**
	F=1.90, p=.15		

well, neither caregivers with clients who attended day support programs or day hospital programs showed significant changes over time in their feelings about institutionalization (see Table 7.9). The likelihood of approving or disapproving of placing the person they were caring for into long term care did not vary over time according to the age, gender, marital status, or educational level of the caregiver.

Satisfaction with Day Program Scale

The Satisfaction with Day Program Scale was completed by caregivers at the three times of testing following the client's entry into the program. Average scores ranged from 29.1 at Time 3 to 29.9 at Time 5, out of possible total score of 35.5. The scores of all caregivers who completed the satisfaction scale at Time 3 (n=101) were examined by model of care, age group, gender, marital status, and educational level. The only difference which showed significance was for gender. Male caregivers scores on the satisfaction scale averaged 26.9, compared to those for women of 28.8 (F=6.1, p<.05). Scores on the day program satisfaction scale were examined over time for the total group and by model of care (see Table 7.10), gender, level of education, age group, and marital status. There was an interaction effect between time and day satisfaction scores on the basis of gender (see Table 7.11) and age group (see Table 7.12).

Table 7.10 Satisfaction with Day Program (Mean) by Model of Care by Time

Model of Care	Time 3	Time 4	Time 5
Day Hospital	29.3	30.0	30.1
Day Support	28.3	27.9	29.4
Total	**29.1**	**29.3**	**29.9**
	F=2.03, p=.14		

Table 7.11 Satisfaction with Day Program (Mean) By Gender by Time

Gender	Time 3	Time 4	Time 5
Men	27.2	28.4	29.8
Women	29.8	29.7	30.0
F=3.39, *p<.05			

Table 7.12 Satisfaction with Day Program (Mean) by Age Group by Time

Age Group	Time 3	Time 4	Time 5
<50 Years	31.8	31.2	29.6
50-64 Years	29.3	28.3	30.0
65-74 Years	28.3	29.8	30.4
75 Years or Older	28.0	28.8	29.4
F=3.14, **p<.01			

Caregivers were asked to indicate what they liked best about the day program. The ten most frequent reasons are listed in Figure 7.8 and contrasted by model of care. Overall, caregivers were more concerned with client benefits of attending a day program, than the benefits to themselves. Client stimulation was what they liked best, followed by respite and the positive effect the day program was having on the client. Several reported that they liked everything about the day program. There were no significant differences noted between what caregivers of cognitively impaired clients and those of cognitively intact clients liked best. When asked to indicate what they liked least about the program, 61.3% of the caregivers said that there was nothing that they did not like. Again, the ten most frequent responses have been tabulated and contrasted by model of care (see Figure 7.9). Of those who answered time limitations or time conflicts was the most frequent response. Transportation or living too far away from the program was considered a detriment by some. Caregivers of clients who were cognitively impaired (26.4%) were more likely than caregivers of clients who were not cognitively impaired (9.2%) to indicate that time conflicts were a problem ($\times^{2=}$10.0, p<.05).

Figure 7.8 Features Caregivers Liked About Programs by Model of Care

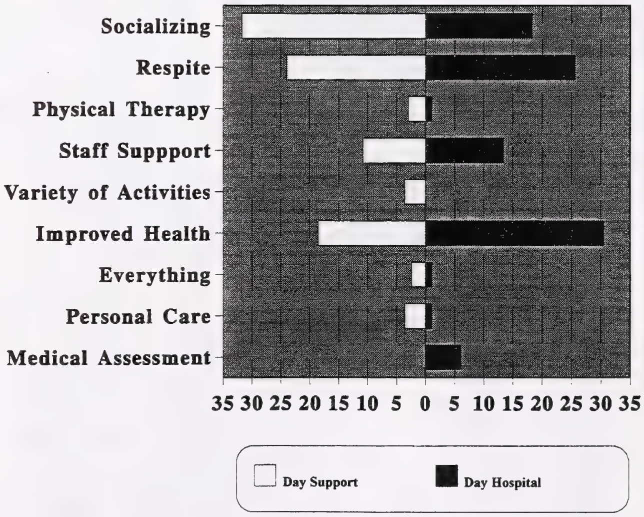
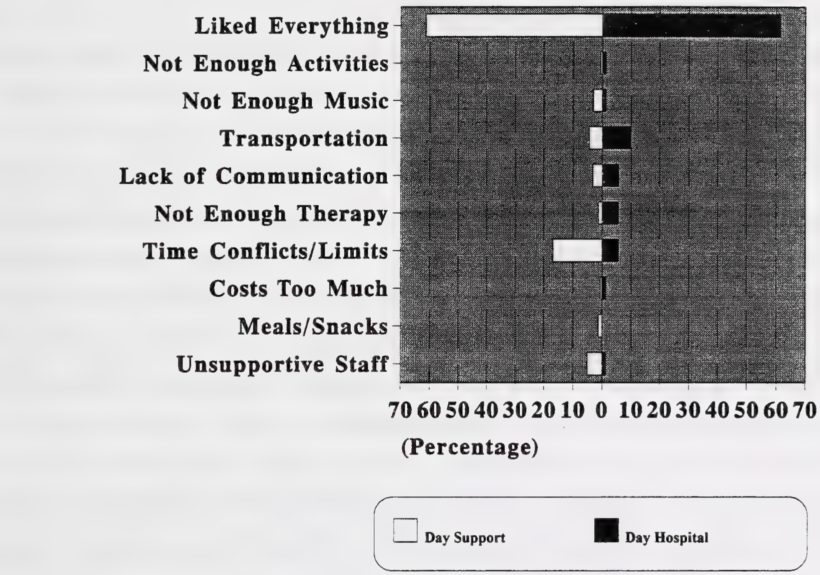


Figure 7.9 Features Caregivers Liked Least About Programs by Model of Care



By and large, caregivers appreciated and strongly supported the services provided through the adult day programs. The impact of having a family member attend an adult day program is reflected in the following excerpts from interviews with caregivers. One caregiver commented "it's been good for him, because I find that he's a little bit more refreshed, kind of alert when he comes home." Many caregivers talked about the stimulation the program provided for the clients. "It occupies her mind", one caregiver stated. Another stated, "when my wife comes back, just talking to her and asking her things, you can see that she's interested. . . . she's not just got a blank mind then. Her mind is working and I think this is part of what we must do is keep her mind occupied." Still another commented, "it benefits her quite a bit. I feel she's more responsive than she was before. We have things to talk about." Another caregiver commented, "He really enjoys it and they are telling me that he's opening up. He's initiating conversations now whereas before he just kind of gave feedback into what was already kind of going on." "It benefits her quite a bit. I feel she's more responsive than she was before. We have things to talk about."

Caregivers talked about other positive effects attending the day program had on the clients. One caregiver suggested that the program had made her family member's life "a little happier, even though, you know, it's difficult". According to another caregiver, as a result of attending a day program, the client "was feeling good and it [the day program] has been building her confidence." A third suggested that the client was “not as depressed as she had been sitting at home”. One caregiver was amazed that "the tests . . . that they did this morning, he [the client] did better on them than he did a year ago [before attending the day program]." Another caregiver reported, "It was nice the mornings that he was going because he looked forward to it. . . . and I think he was walking better and his outlook was great."

Caregivers also identified some of the activities that clients particularly liked at the day program including games, day trips, and musical events. One caregiver reported that "he [the client] enjoyed the bowling so much, and he was happy when he scored". Another caregiver said the client "loved the musical part of the program." Other caregivers mentioned the musical aspect of the program as in the following statement: "he [the client] loves to go and he loves to keep time with the music." One caregiver enjoyed being involved with the program. "I was there for dinner twice when they had family dinners and it was very enjoyable," she stated.

As did the clients, caregivers had much to say about the staff at day programs, mostly of a positive nature. Comments from caregivers included the following: "I’ve been down to have a look and I find that the nurses and the therapists, they’re great people and they care;" "I think it’s a great program and the nurses are so understanding. They help. Nothing seems too much for them to do;" "I had confidence in their ability;" "it seems like they [the staff] are there because they want to be there and not because they have a job to do. . . . and they also provide a lot of support;" and "I think given sensitive people that they are in there, they realize that the love and the caring for those clients goes much further than the monetary gain." Isolated comments included those such as "I think that they [the staff] need to realize that she’s doing the best she can for her situation and to kind of not be so hard on her." One caregiver identified a need for more trained staff. She said, "it’s all right to have volunteers, but if they have no knowledge. . . . you need people that are trained. The government really needs to allow more money for it or something."

The respite service and support for caregivers provided by adult day programs was appreciated by many of the caregivers. One caregiver stated, "Well, the program has given me an insight of how people are trying to help and it makes me feel better". Another commented, "It was a wonderful thing that gave me Thursday afternoons free that I could go and have lunch with a friend . . . read a book . . . I could do just as I wanted and I didn’t have to wait on anybody or make any special lunch or supper and it was just really great for me." "The relief of knowing that somebody is taking care of her. . . . I can go get something else done or do something else. I have some free time to myself and that was very important to me." A great sense of relief was evident throughout many of the interviews with caregivers. Another summarized, "I know when she’s there my mind is at rest, you know. I know she's in good hands and she appreciates it and I do and I don't think there's much more I can say."

Despite overall positive responses toward the adult day program, caregivers did offer some suggestions for improvement. A number commented on time restrictions as evidenced by comments such as "the only thing that I do wish would be that he could go more than the once a week" and "had there been more days we would have asked her to be enrolled for more days". Another caregiver stated, "I hope it [the client's attendance] was maybe twice a week instead of once." Transportation issues were also raised by caregivers. One caregiver stated, "I was running her into town and back, so that's four trips [each week]". Others made comments that the variability in times when DATS arrived to pick up and drop off clients made planning their day's activities more difficult. "I had to be sure that I was back again when he got here," one caregiver responded. Another caregiver talked about the stress involved in getting the client ready for an 8:30 pick up. As she stated, "it was the anxiety of seeing that he was ready on time." Caregivers did appreciate the helpfulness of those providing the transportation as evidenced by the following comments: "These fellows [bus drivers], they just make a nice ending to a full day for the people that are involved," and "even the boys that came for him, you know, in the mornings were all really good. They never left him until he was right inside the door, and I felt they were really good that way with him, you know."

Social Support

The Social Relationship Scale was administered to caregivers at Time 5 and was completed by 73 caregivers. The average number of individuals that caregivers reported in their network was 7.6, and ranged from two to 20. As shown in Table 7.13, those in day support programs reported a higher number of individuals in their network, but this difference was not statistically significant. Neither were there significant differences on this variable when scores were examined on the basis of program type (comparison/demonstration) or geographical location (rural/urban). Women reported an average of 8.0 individuals in their network compared to men who averaged 6.4, a non-significant difference. Numbers of individuals in caregivers' networks did not differ significantly on the variables of marital status, education, or gender, as already mentioned. There was a significant

Table 7.13 Quantity and Quality of Social Support of Caregivers by Model of Care

	Day Hospital	Day Support	t-value	Significance
Mean Number of Persons in Network	7.0	7.8	0.67	p=.51
Average Quality of Support Network	1.9	1.8	0.31	p=.31

difference by age group. Caregivers in the 65 to 74 year old age group reported significantly more individuals in their networks than did any of the other groups (F=5.56, p<.01). This 65 to 74 year old group averaged 9.9, followed by the under 50 age group with 7.1, the 75 and older group with 6.6, and the 50 to 64 year old age group with 6.4.

Caregivers also were asked to indicate the helpfulness of discussing issues (health, financial, societal, etc.) with the individuals they named in their networks. Scores could range from -3 (not helpful at all) to +3 (helpful all the time). The average score of caregivers was 1.9, indicating that individuals in their network were helpful most of the time. There was no significant difference by model of care (see Table 7.13), geographical location, or program type. There were no significant differences in scores on the basis of marital status, level of education, or by age. However, female caregivers' scores averaged 2.0, compared to male caregivers who averaged 1.4. This difference was statistically significant (t=-2.9, p<.01) and suggested that female caregivers perceived they were receiving more helpful support from individuals in their networks than did their male counterparts.

Comparison of Outcome Data of Caregivers Who Completed the Study with Those Who Did Not

Total caregiver burden scores did not differ between the group of caregivers who completed the study and those who did not. There were no significant differences in the scores of caregivers who completed the study and those who did not on their ratings of current quality of life, quality of life next year, last year, or in the best year of life and those who did not at the time of the first interview. IWB scores did not vary significantly between those caregivers who completed the study and those who did not. There was no significant difference in the present state of health reported by caregivers who completed the study and those who did not at the time of their initial visit. For the group of caregivers who completed the study, their average score on the attitude toward institutionalization was 2.9 and for those who did not the average score was 3.7. This difference approached statistical significance (F=3.6, p=.06), suggesting that those caregivers who did not complete the study were somewhat more likely to approve of placing the person they were caring for into a long term care facility. At Time 3, the scores of caregivers who did not complete the study on the day program satisfaction scale averaged 27.3, and those of caregivers who did complete the study averaged 28.8, a difference which approached statistical significance (t=-1.89, p=.06). Although at Time 3 clients had been attending the day program for less than two weeks, caregivers had already formed perceptions of their satisfaction with the program, and those who rated the program lower were somewhat less likely to complete the study. Even though the scores of caregivers who did not complete the study were somewhat lower than those of caregivers who did complete the study, both averages were quite high, indicating a high level of satisfaction with the program.

Comparison of Outcome Data of Caregivers by Program Type and Geographical Location

The burden scores of caregivers did not change significantly over time by either program type or geographical location. Neither quality of life now or quality of life next year scores differed over time for caregivers who completed the study. IWB scores did not vary over time by program type or geographical location. There were no interaction effects between time and program type or geographical location for current or past perceived health status. There was an interaction effect between time and feelings about institutionalization by geographical location (see Table 7.14). There were no interaction effects between time and program type or geographical location for day program satisfaction scores.

Table 7.14 Feelings About Institutionalization (Mean) by Geographical Location by Time

Geographical Location	Time 3	Time 4	Time 5
Rural Sites	2.9	2.7	2.6
Urban Sites	2.4	2.3	3.1
F=5.74, **p<.01			

SUMMARY STATEMENT

The two primary groups of informal caregivers fall into the spouse and daughter categories. Spouses are most often elderly themselves and there was an indication that many suffered from considerable health problems. Daughters are often dealing with the demands of raising young families, while concurrently providing care for aging parents. The complexity of situations that these caregivers are dealing with in the community continues to increase. A summary of changes over time for each of the outcome measure variables is provided in Table 7.15. As indicated there were no significant improvements for the total group of caregivers. However, caregivers were able to maintain their health and quality of life while continuing their caregiving role with the support of the day day programs. Indeed, for all except those caregivers of clients in the younger than age 50 group, satisfaction with the day program increased over time. The results of this study suggest that adult day programs offer one form of assistance for caregivers who are providing for family members in such a way as to support their continued community living.

Table 7.15 Caregiver Outcome Measure Variables--Changes over Time

Instrument	Model of Care		Age				Gender		Marital Status		Education				Total Group			
	Day Hospital	Day Support	< 50	50 to 64	65 to 74	75 or more	Male	Female	Married	Not Married	Grades 1-6	Grades 7-9	Grades 10-12	Post Secondary	Time 3	Time 4	Time 5	Significant Difference
Caregiver Burden	no	no	no	no	no	no	no	no	no	no	no	no	no	no	42.7	39.5	41.7	no
Self-Anchoring Striving Scale	no	no	no	no	no	no	no	no	no	no	no	no	no	no	6.3	6.1	5.9	no
Index of Well-Being	no	no	no	no	no	no	no	no	no	no	no	no	no	no	10.3	10.3	9.9	no
Health Status	no	no	no	no	no	no	no	no	no	no	no	no	no	no	3	3.1	3	no
Feelings about Institutionalization	no	no	no	no	no	no	no	no	no	no	no	no	no	no	2.6	2.5	2.8	no
Satisfaction with Day Program	no	no	N **	P **	P **	P **	P *	P *	no	no	no	no	no	no	29.1	29.3	29.9	no

*p<.05 N=change in a negative direction
**p<.01 P=change in a positive direction

Chapter 8:

Day Programs in Alberta's Long Term Care System--

Issues, Conclusions, & Recommendations

CHAPTER 8: DAY PROGRAMS IN ALBERTA'S LONG TERM CARE SYSTEM: ISSUES, CONCLUSIONS AND RECOMMENDATIONS

The framework for this chapter is provided by the primary and secondary objectives which were the basis of this study. Results of the data collection process and interpretation of findings have been presented in some detail in Chapters 4 to 7. In this chapter, the study results are presented in a somewhat different and abbreviated way in the context of the specific objectives identified at the outset. Conclusions and recommendations are included in this chapter. Sources of data for the study objectives presented in Table 1.1 were program data, client data, admission/ discharge data on acute care, home care, and long term care facilities, and referral agency data. The specific sources of data for each objective are listed in Table 1.1. Instruments designed by the investigators to collect this data included the Program Data Form, the Client Information Form which included nine questions from the Alberta Assessment and Placement Instrument, Caregiver Data Form, and the Satisfaction with Day Program Scale. In addition, a number of standardized instruments were used to assess health and functional status and quality of life of clients and caregivers. Current admission/discharge statistics for acute care, home care, and long term care facilities were obtained from Alberta Health for comparison purposes. While the responsibilities were primarily those of the study team, detailed discussions were held with the Adult Day Program Demonstration Project Evaluation Committee to ensure that all areas of importance were covered on the data collection instruments. Program managers and staff of the sites assisted a great deal with the collection of program data, with accessing the study participants and their caregivers, and with resolving any issues of concern which arose in relation to the implementation of the study protocol.

PRIMARY OBJECTIVES

OBJECTIVE 1A: To make recommendations on the role of day programs in Alberta's long term care system.

Program and Referral Agency Data

Strengths of programs from the perspective of program managers included allowing clients to maintain a sense of independence and quality of life through supported community living and support and respite for caregivers of the frail elderly. Program managers were emphatic in their descriptions of the need for day programs within the continuum of long term care. Program managers identified client and family satisfaction, high number of referrals, and long waiting lists as some of the indicators supporting this need. However, programs were impeded by the cost of offering services to a limited number of daily hours. Only one program offered a day program in evening hours, and in that case for one evening per week. All were closed on Saturday and Sunday and many for a holiday period of several weeks in the summer. Because of space and cost constraints, most programs normally restricted access by clients to once or twice per week. Average client attendance was 1.8 times per week. Other issues concerned the restrictions in the length of time in any one day that clients could participate in day programs and limitations in flexibility of scheduling, again due to resource constraints. The opportunity for clients to attend programs for additional daily hours and for greater flexibility in scheduling client participation to suit individual needs are issues that could facilitate program attendance by clients and enhance outcomes for both clients and caregivers. Programs tend to be relatively 'lean' operations with limited staff, and time for planning programs tailored to the needs of individual clients is minimal. Under these circumstances, the range of activities and services available to clients at any one time may be limited. Day programs could be enhanced by measures to allow them to design and offer activities and programs which would meet the diversity of clients' needs, interests, and abilities.

Referral agencies also considered adult day programs to be an important resource in the long term care system. They again pointed to client stimulation and the provision of respite for caregivers as key benefits. Referral agency managers also identified that their agencies were unable to provide many of the services offered in adult day programs, and for the most part they perceived that the need for adult day program services was going to grow as the population continued to age. Indeed, when asked to identify services which they believed would enhance day programs, the most common response was the need for greater availability of spaces for clients.

Program cost data has been presented in Chapter 4. Comparisons between actual expenditures for programs are based on information available from the program managers. Currently there is no standardized reporting system for revenues and expenditures for adult day programs and this is a limiting factor in any attempt to discern the meaning of cost data, for each programs uses what might be thought of as standard categories in a slightly different way. For instance, although there are space costs associated with every program, cost data for rental of space is reported for only three of the 14 programs in the study (see Tables 4.13, 4.14 and 4.15). Although there were ongoing expenditures for utilities, taxes and maintenance for each of the eleven sites which did not report rental expenditures, these were not known to the day program as they were absorbed by and integrated into the total costs for the agency providing the space. Client weekly expenditures were determined on the basis of expenditures reported by each program divided by the average number of client days for each program. Such expenditures must be qualified by the fact that data was incomplete for many of the programs due to a variety of circumstances. Revenue information is also provided for programs which reported this information. It should be also noted that revenue data was not received from two programs in the study.

Program Costs

Funding issues in terms of the cost to clients who did not have the means or were not willing to pay for the program were serious problems for some programs. Long range financial planning was difficult for many programs as funding from year to year was uncertain. Difficulties associated with providing and paying for transportation for clients to attend the program were expressed by program managers, referral agencies, clients, and caregivers. A number of programs had long waiting lists and were not able to respond quickly to the needs of clients, while still other programs had not received sufficient numbers of referrals to make the programs viable.

It would be advantageous to develop a management information system in which adult day program revenues and expenditures could be identified using methods which would be standard for all programs. If this information were to be set up as a computerized data base, information could be reported by programs on a regular basis. This would allow for identification of the true costs of adult day programs and comparative assessments of revenues and expenditures could be made across a number of categories in the long term care system. The reporting framework for revenue and expenditure amounts as delineated on the Program Data Form could form the basis of such a data base. However, decisions would need to be made about the parameters of the categories and the nature and frequency of the reporting system. There would need to be collaboration with the programs involved to identify the boundaries of the reporting categories identified as forming the basis of the system. Developing such a framework for the reporting of financial information would allow for the development of guidelines for the funding of programs at appropriate levels to benefit clients.

Revenue and expenditure data for adult day programs must be qualified by the fact that the reporting categories have not been standardized, that a number of programs were small and not yet well-established in their respective communities, and that start-up costs are incorporated in a number of the new programs. However, if one were to take the average client weekly expenditure at a day support program of $181.90 ($107.00 per day times 1.7 days per week), it is likely that no matter what institutional comparative data in long term care is provided, the expenditures for adult day programs will represent a lower alternative. The average weekly expenditure per resident for long term care facilities in 1993 was $770, $616 paid by the government and $154 by the resident (Personal communication from Community/Continuing Care Branch, Alberta Health, August 18, 1994). This is an expenditure which is incurred for the most part on a permanent and ongoing basis for the client. Costs are more fixed and have less possibility of changing with alterations in the circumstances of the client. The weekly client expenditures for adult day programs are based upon the average attendance figure in this study. Consideration needs to be given to the fact that length of stay is temporary in adult day programs. While it is true that some clients of day support programs have attended over a long period of time, this is not true of most clients. If average client expenditures were to be compared for day support programs and long term care facilities, the relative cost advantage would be even more dramatic because it would reflect length of stay. It must, however, be recognized that there were additional expenditures for some adult day program clients. Some were receiving services from Home Care, but others were not. Indeed, it was pointed out that very few of these people, one-third of whom lived alone, were even receiving handyman services. However, such additional costs do add to the total health and social service cost incurred by day program clients. The value of the services provided by caregivers is another important factor in any consideration of revenues and expenditures and must not be forgotten. In any case, it is highly unlikely that even given the additional community services consumed by these frail elderly people that expenditures would exceed those for long term institutional care. A comparison between day hospital costs and costs of acute care would lead to a similar conclusion. The average weekly cost of attendance at a day hospital was $356.00 ($178.00 per day x 2.0 days per week). Average length of stay at day hospitals was 22.8 weeks. Total cost of attendance on an annual basis taking length of stay into consideration would be $8,116.80. Although it is difficult to directly compare these costs to acute care, an average weekly cost of occupying an acute care bed in Alberta is considerably more at approximately $3655.40 ($522.20 per day x 7 days per week) (Statistics Canada, 1990). The average length of stay in an acute care hospital for an individual over 75 years of age in Canada is 24.6 days per year for men and 33.4 for women (Desjardins, 1993). The total cost of stay in an acute care facility per year would thus be $12,846.12 for men and $17,441.48 for women.

Quality of Life Issues for Clients and Caregivers

The quality of life experienced by the frail elderly is of considerable concern, and clients were assessed using measures of quality of life in this study. Client and caregiver satisfaction with the programs they attended was also evaluated. In general, clients and caregivers in day programs exhibited reasonably good levels of quality of life considering the life circumstances with which they were faced. While we do not have comparable measures of quality of life for those in long term care facilities, other studies have reported lower levels of expectations, outlook on life and program satisfaction of the institutionalized elderly (Hedrick et al., 1991.). Indeed the client sample in this study responded negatively to questions about their feelings about entering a long term care facility.

They indicated that they disapproved of doing so, and indicated that they thought that their caregivers were slightly less disapproving than they were. The latter perhaps indicated that they were anxious about the burden they felt they were imposing on their caregivers. The message is reasonably clear. Elderly people want to remain in their homes in the community despite major physical and mental losses and increasing frailty. Supported community residence as an alternative to entering a long term care facility was a significant objective for this group of clients and caregivers. It is difficult to measure the human costs of institutionalization in long term care facilities, but this group of people reported that for them this was not an alternative of choice.

Clients of Adult Day Programs

The average age of clients in day programs (72.3 in day support programs; 75.8 in day hospital programs) is slightly lower than the average age at admission to nursing homes (79.65) and marginally higher in the day hospital group than the average age of admission to auxiliary hospitals (75.75) (Alberta Health, 1994). When compared with the average age of 82 for all residents of long term care facilities (Alberta Health, 1994), the average ages of clients in the two program models is somewhat lower. It was noted that in comparing the diagnoses of the day program and residential care groups, similar diagnoses were reported. However, the day program population clearly had compromised health and functional abilities with one-third experiencing urinary or bowel incontinence. Either of the latter conditions often constitutes a reason for institutionalization. One-third needed some help with dressing, 16% needed help to go to the bathroom, 14% needed help to transfer, and a similar percentage needed assistance in order to eat. The average number of days per week spent by clients in day programs was 1.8 with an average length of stay of 10.4 months. Admissions of the study population to acute care facilities averaged 8.5 per program over a three month period. Although there were admissions to long term care facilities, these were mainly from day support programs (3.6 per month over a three month period) and primarily for the purpose of providing respite for caregivers.

Despite the fact that one-third of the day program clientele lived alone, these program participants had a high degree of contact with members of their families with 86% having telephone contact twice a month or more frequently and over half having face to face contact with family members on a daily basis. They also reported quite a number of persons in their social network (7.3 persons on average) and viewed their relationships with the other persons as being supportive for the most part. The functional assessments carried out over time on these clients indicated no deterioration in their conditions over the study period, and on the Quality of Life Index there was an increase over time in the level quality of life reported by clients. Clients expressed the view that they did not favour entering a long term care institution, but saw their caregiver as slightly more favourable to this. Nevertheless they were highly satisfied with the day programs they attended and scores averaged

29.5 out of a total possible of 35, and stated that the opportunity to socialize was a positive feature (34%), with a number mentioning physiotherapy (20%) and staff support (17%). Over 40% stated that there was nothing they didn't like about the program attended. One client stated "Well, I thought right away, off the bat, that it was a good program. . . . It seemed that the more I went the more I wanted to go. . . .Things happen most every day that are interesting." Another commented "[The day program] made a great difference to a fellow [like himself] that's sitting around home not doing much. . . . It made it [life] easier."

Caregiver data provides a profile of a group composed largely of women (72%) whose average age was 61.6. Most were married (88%) and 57% were the spouse of the client. Caregiver burden averaged 42.9 on a 100 point scale, and caregivers saw the impact of their responsibility for the client in the time dependence and developmental burden areas. They saw their health as being reasonably good, although that reported by men was lower than that for women. They tended not to favour institutionalization for their clients and were highly satisfied with the day program noting that the areas which they felt the best about were client stimulation, the positive effect on the client, and the respite afforded themselves. Over 60% said that there was nothing they did not like about the program. One caregiver stated "Every time he [the client] came home he was happy [and had] to say something about it, especially about the bowling, so this [the day program] was a really great thing and I just wish he had consented to go sooner. And then for me, it made my life better. . . .I think it's a very worthwhile program." Another stated, "She [the client] felt good about it [the day program] because she was getting out and meeting people, so I think it was that she herself was feeling good and it has been building her confidence. . . . without the program she wouldn't have anything to look forward to and something to get out of bed for." One caregiver was amazed that "the tests . . . that they did this morning, he did better on them than he did a year ago [before attending the day program]."

In that day programs provide direct benefits to clients and indirect benefits to their caregivers, hours of operation are of considerable concern to the population served. The average weekly hours of operation of programs studied at under 35 are relatively low considering that the service offered is a vital one designed to maintain the frail elderly in their homes and delay or avoid the need for entry to a long term care centre. The lack of availability of evening and weekend hours, and limitations on the number of hours clients may attend the day program on both a daily and weekly basis are issues which must be addressed if programs are truly going to serve the needs of people in the future. The closure of programs for holidays also creates an added stress for clients and caregivers who rely on the services provided by day programs. While some of the suggested increases in hours would be to benefit the current clients and caregivers, the thrust of the recommendation is to increase the spaces available in order to make the program more accessible to the client population which could benefit from it. It appears that the current group of clients have very committed caregivers who have made considerable sacrifices in order to keep their client in the community. It is likely that there is a much larger client population which could benefit from the services of the day program who do not have ‘hardy’ caregivers. In order to encourage this group to choose the day program option, it needs to be a more viable alternative in terms of the hours, transportation and costs.

Approximately one-third of the programs were located in predominantly rural communities, while two-thirds were situated in urban areas. The client/caregiver/program sample is thus enhanced by a rural-urban mix and by the views of participants in programs in various locations throughout the province. Most programs had been in operation for several years, but one-third had been established within the past two years. The number of programs in operation is relatively small in comparison to the steadily increasing proportion of elderly people in the population. Access to programs is therefore limited by the total number of spaces available. In order to use day programs more effectively to ensure the viability of frail elderly Albertans in independent community living, more program capacity is required. It should be noted, however, that demand for programs is not uniform. Those programs which tended not to have filled their spaces were typically located in rural areas and were new programs. Undoubtedly several factors are at work here, and these likely include a smaller client population base in these areas, the services and benefits of the programs may not be well known, client fees may be serving as a deterrent, and transportation may present more of a problem. If all day programs, not just government funded day support programs, were to become a part of the single point of entry program, the needs of every client who is assessed would be evaluated in terms of their potential to benefit from the program.

OBJECTIVE 1B: To validate the initial provincial typology of day programs and to assess various models of day programs (including existing and new models).

For this objective, it was projected that program and client data as well as information from the literature would provide the basis for addressing it. The provincial model of day programs is essentially of two types--day support and day hospital. Although it had been thought that there might be an additional type of day program model called integrated day support, meaning those programs located in long term care facilities, program, client, and caregiver data in this study do not show significant differences between this suggested third model and the established day support and day hospital program models. There is, however, a clear differentiation between the services offered by the day hospital and day support programs, and client data indicates that a different group is being served in these programs. On average, those who are being assessed and treated in day hospitals are a slightly older and more physically ill group than the client group in day support. The services offered by day hospitals would appear to be serving the distinct needs of the clients they are admitting to their programs. These services come at greater financial expense, for it is clear that day support programs are considerably less expensive. However, there would seem to be a strong case for the availability of both models as a means of providing client and caregiver support to prevent or avoid institutionalization of the frail elderly in long term care facilities. A relatively small number of day hospitals providing multi-disciplinary assessments and larger numbers of day support programs to provide health and social support on an ongoing bases would seem to be important in making the services accessible to a greater number of senior Albertans who could benefit from the programs and services.

Several typologies of adult day programs can be found in the literature. In a 1993 report of adult day care centres in British Columbia, the authors suggest that day care centres in B.C. most closely represent the classification system of Weissert, who categorized day care programs into three types, the first drawing their clientele from nursing homes and rehabilitation hospitals, the second from the community, and the third focusing on the needs of special populations. In Alberta, the client situation varies from this typology, as few clients from nursing homes are included in either day hospital or day support programs, and most clients in both are from the community. Instead the difference between programs is based on the client population as delineated above. There are several programs in Alberta which do draw their clientele from special populations, such as those with Alzheimers, or those with chronic psychiatric problems, and it may be that these programs are intrinsically different from more generic day support and day hospital programs which serve clients with a variety of health concerns.

OBJECTIVE 2: To assess whether or not the program objectives are being met and to what degree.

A wealth of information has been elicited from the administration of the instruments relative to the programs, the clients and the caregivers of adult day programs as has been presented in Chapters 4 to 7. The overall objectives of adult day programs in Alberta have been outlined by Alberta Health as follows:

1) To encourage and support continued community living and independence of clients.
2) To prevent or delay admission to a long term care facility or acute care hospital.
3) To facilitate discharge or aid in the transition from a long term care facility or acute care hospital.
4) To assist families and other informal caregivers as they care for persons who may otherwise be at risk of institutionalization (Alberta Health, 1991a, p. 2).

The objectives of day programs are primarily addressed under the following objectives 2A, 2A.1. and 2B.

When program staff were asked about which of eight specified objectives of adult day programs were applicable to each client, 95.6% identified supporting the community living of the client, 77.7% mentioned delaying institutionalization and 77% cited provision of ongoing treatment to clients. Providing services to complement those of Home Care was mentioned by 63.9%, respite for caregivers by 60.4%, short term treatment by 54.9% and conducting comprehensive medical assessments by 42.5%. Finally the objective of facilitating discharge from hospital was reported for 13.8% of the client population.

PROGRAM OBJECTIVE 2A: To encourage and support continued community living and independence of clients.

Program managers identified the objective of supporting continued community living more frequently than any other. In characterizing the effect of day program attendance for their clients, program managers identified improved self-esteem, coping skills, and health status as client outcomes which allowed clients to continue living independently in the community. Program managers also believed that caregivers received support and access to information that assisted them to continue providing care for their family member or friend which helped them remain in the home. The majority of clients in this study did not wish to enter a long term care facility at this time, and preferred to continue living in their own homes. Most caregivers did not want to have the person they were caring for institutionalized either. As one caregiver put it, "There's a lot of love there [the day program]. I can see that with them and I do hope the government realizes that too, that it does keep a lot of them out of extended facilities. If mom didn't have all her ongoing care and support she would be one who would need that type of facility too." Another stated, "I think it's fulfilling for them to at least feel that they still have some self-worth and they're not just being sort of shoved into a nursing home and forgotten about, and I think if you put someone in a day care program, that basically what you're saying is 'I'm just not ready to put her in, you know, into that nursing home yet' and yes, it will come, but I guess you're trying to hang on to them for as long as you can."

PROGRAM OBJECTIVE 2A.1: To improve and maintain the individual's level of physical, social, mental, and emotional functioning resulting in maintaining or increasing the level of independence.

In terms of encouraging and supporting continued community living and independence, data from a number of sources would appear to support the fact that day programs are fulfilling such an objective. Data from clients, caregivers, and program managers form the basis of the discussion relative to this objective. From the vantage point of their actual knowledge of the individual clients and caregivers in their programs, program managers have stated categorically that their programs were filling a gap in services in their communities and that a great many of their clients would not have been able to continue to maintain their living situations in the community without the day program. The survey of referral agencies would appear to support this as those answering the questionnaires identified many positive benefits to clients of attending day programs, but suggested that the limited availability of the programs presented problems of access and availability to clients.

The fact that clients maintained their health status throughout the study period with little deterioration may be of key importance, for the fragility of the elderly people who are potential clients for day programs is such that the expected outcomes from attending day programs need to be viewed in a realistic perspective. Attendance at programs cannot reverse serious losses which are pathophysiological in nature, although the combination of client involvement in activities and health services provided may be successful in offsetting further deterioration in some cases. Although the effect of social support through involvement in the programs of the day centres may well be beneficial to clients and indirectly to their caregivers, the day program intervention is one which focuses on the area of maintaining function as well as improving quality of life and life satisfaction. Thus, even though results of client testing are not dramatic in terms of effecting marked change on dimensions of health and social functioning which were measured during this study, the positive trends noted on these dimensions were encouraging. This fact that clients were able to maintain their level of functioning is a desired outcome and quite likely a highly realistic one in terms of the health status of clients.

Despite the fact that health status remained stable over the six month time frame of the study, a number of the clients made comments in the qualitative interviews which indicated that they felt better as a result of day program attendance. One client stated, "they taught me that I could go up and downstairs [with a walker or cane] so now I can do it on my own, which I hadn't been able to do before." Another commented, "You need to keep busy and you need to keep positive and I've been able to do that because of that [the day program]. It should be emphasized that the comments of the vast majority of clients on the open-ended questions were highly positive about the day programs. Over a third reported that the feature from which they benefitted the most was the opportunity to socialize with other clients and staff, while another 20% reported that the physiotherapy and exercise was the area of most benefit to them. When asked what they liked least about the programs, approximately 42% of clients stated that there was nothing they didn't like about the programs.

Just over a quarter of caregivers indicated that client stimulation was the feature of the day program which they appreciated the most and just under a quarter mentioned respite as the feature of the program they liked best, and just under 25% of caregivers pointed to the positive effect the day program was having on the client as the feature of the program they were the most pleased about. Another feature identified by many caregivers was the helpfulness of the staff of the day program (11.6%). Those who participated in the qualitative interviews made comments reflecting the response of individual clients to the day programs. One caregiver stated that the client "was not outgoing, so he never was involved in the fun things of life and now he's having fun and he comes out of there [the day program] and he says, 'I had such fun today.' I don't think this man ever enjoyed the good things in life and now he is." Another suggested that the client was "not as depressed as she had been sitting at home". One caregiver commented that "it's a program that gives lonely people a fullness. It gives them a reason to get up in the morning. My uncle loves to get dressed up. When it's dance time he puts on his pink shirt and his burgundy tie. . . .It provides so many things to a person with a dull life." Another caregiver reported, "It was nice the mornings that he was going because he looked forward to it. . . . and I think he was walking better and his outlook was great." High satisfaction with the day program was apparent for both clients and caregivers and did not change over time.

PROGRAM OBJECTIVE 2B: To prevent or delay admission to a long term care facility or acute care hospital.

Although it is difficult to assess outcomes of this objective definitively for the elderly client population of day programs, it is apparent that the characteristics of day program clients are similar to those who are residents of long term care facilities. Comparing characteristics of clients in day programs with elderly people in other settings in the health system was identified at the outset of the study as providing comparison data of value in evaluating the role of day programs in the long term care system in Alberta. Client, caregiver, and admission and discharge data have also been examined in this section. Residents of long term care facilities were on average older (83.7) than clients in the day programs studied (73.9) (Alberta Health, 1991b). Although the clientele in day programs studied was younger than the client group in long term care facilities by about eight years, it was clear that they have similar diseases by the diagnoses identified among the selected group of clients studied. In that day program clients are a frail and vulnerable population, it is clear that they represent a group at risk for institutionalization.

The Opinion on Institutionalization questionnaire items asked of clients and caregivers revealed the propensity of the caregiver to place the client in a long term care facility. Again most caregivers disapproved of institutionalization for the individual for whom they were caring. However, almost 30% did state that they would approve of such a step for the client. Thus, although the caregiving group is a committed one, various circumstances pertaining both to the client and to the caregiver may well influence the caregiver to express an openness to the possibility of institutionalization. Clients themselves were, on average, somewhat negative about the possibility of entering a long term care facility, but they perceived their caregiver as being slightly more positively disposed to it.

The respite and support for caregivers provided by adult day programs was raised as a positive benefit of the programs by many of the caregivers who were interviewed. One caregiver related her story as follows, "I had been taking care of mom for about two years and had given up my career to take care of her, but I definitely needed to have that time to get out, to get away from her and I feel she needed the time as well to get away from me." Another commented, "The thought of not having to worry about where he was or that he's in a safe place for that many hours. . . . It was just like a big burden was lifted." Another when sharing what she liked best about the day program stated, "Now this may sound so silly, but to be able to know that for five hours you can do exactly what you want to do when you want to do it." She continued to say that, "It was the only five hours, bascially, in that seven days a week whereby we were doing something separately. . . .When he came home he had something exciting to tell me." A great sense of relief was evident throughout many of the interviews with caregivers. Another summarized, "I know when she's there my mind is at rest, you know. I know she's in good hands and she appreciates it and I do and I don't think there's much more I can say."

In addition to relieving some of the burden of care, caregivers also believed that the day program extended the length of time the client remained living in the community. One caregiver was adamant about the role the day program was serving, when asked if the day program had made it possible for the care recipient to remain in the home, the caregiver stated "yes, definitely". Another stated "He [the client] got so that his communication was less and less and his world got smaller and it was hard to reach out and help him, but I did not want the alternative of putting him in long term care, where it would be the same thing in a different setting, because that's what it would amount to, so this was wonderful." Several caregivers referred to the awesome responsibility of caring for a frail elderly person in their home. "You are on 24 hour call . . . . and they get to be very demanding and they won't do anything for themselves." Another stated, "For some reason they automatically assume because you are at home you can take care of this person on a full-time basis and you can't. You can't do it 24 hours. You'd go absolutely snaky." They perceived the adult day program as providing a reprieve from the demands associated with caregiving.

PROGRAM OBJECTIVE 2B.1: To conduct comprehensive multidisciplinary assessments and clinical investigations in the elderly client (Day Hospital).

It was clear from the interviews with program managers and from client and caregiver data that the day hospitals were carrying out this responsibility and doing so to the satisfaction of all concerned. It was apparent that day hospitals were an important source of referral of clients to day support programs, and that continuity of care was the outcome of initial assessment and treatment in the day hospital. Being able to offer multi-disciplinary assessments to clients was identified as a strength and a unique feature of day hospitals by program managers. Additionally, clients appreciated the assessment and treatment they received at day hospitals. As one client stated "they found out that I wasn't doing what I should with the pills . . . . it's [the day program] been a great support for me." Another commented, "That's what made me happy--that they provide the various tests and find out whether they can do anything for me or not." Yet another was thankful for the care provided, as indicated in his statement "I think those tests with blood pressure being high--they really worried about it-- and they do something, you know--try to get it down and they did."

PROGRAM OBJECTIVE 2B.2: To provide short term treatment directed toward improving and maintaining the client's level of physical, social, mental and emotional functioning (Day Hospitals).

Client data has been presented which indicates that clients were maintaining their levels of physical and instrumental functioning over the period of the study. Referral agencies also identified physical and occupational therapy as important components of day programs and beneficial to their clients. Qualitative data from both clients and caregivers supported efforts on the part of staff to provide treatment and rehabilitation services for these frail elderly clients. Satisfaction with the levels of service provided by day hospitals on the Satisfaction with Day Program Scale was very high. One client reported, "I was interested in what therapy I could get and I was surprised when I was told about the exercise program and the volunteers putting my left arm and my left leg in the range of motion. That meant an awful lot to me." Caregivers referred in the qualitative interviews to the positive effects of the programs upon the clients, an encouraging state in terms of maintaining the client functional status: "It benefits her quite a bit. I feel she's more responsive than she was before. We have things to talk about." Another caregiver commented, "He really enjoys it and they are telling me that he's opening up. He's initiating conversations now whereas before he just kind of gave feedback into what was already kind of going on."

PROGRAM OBJECTIVE 2B.3: To provide health support services which enable individuals to live in the community for as long as possible, preventing or delaying institutionalization (Adult Day Support Programs).

The fragility of the elderly people who are potential clients for day programs is such that the expected outcomes from attending day programs need to be viewed in a realistic perspective. For a great number of clients, attendance at programs could not offset or reverse serious losses or deficits which are pathophysiological in nature. Although the effect of social support through involvement in the programs of the day centres may well be beneficial to clients and indirectly to their caregivers, the day program intervention is one which is more in the area of maintaining function as well as improving quality of life and life satisfaction. Thus, even though results of client testing are not dramatic in terms of effecting marked change on dimensions of health and social functioning which were measured during this study, the positive trends noted on these dimensions were encouraging.

PROGRAM OBJECTIVE 2B.4: To provide services within the continuum of longterm care which complement and maximize the use of home care and other community service providers (Adult Day Support Programs).

Adult day programs appear to be providing services which complement those provided through Home Care and other agencies. Program managers reported close communication between adult day programs and Home Care. Home Care was also one of the main sources of referrals to adult day programs. For those day programs in which it is used, the single point of entry model, utilizing the Alberta Assessment and Placement Instrument provides a framework for communication and coordination of care. These close linkages help to ensure that clients are receiving those services from which they could benefit, while at the same time reducing the potential for duplication of services. Through utilization of a case coordination system at day programs, clients and caregivers can be linked to other community services from which they might benefit. Day programs which are located within acute or long term care facilities have the advantage of being able to utilize and share resources with the facilities. This may include such resources as diagnostic and rehabilitative services, activity and recreational programs, or equipment such as whirlpool baths.

PROGRAM OBJECTIVE 2C: To facilitate discharge or aid in the transition from a long term care facility or acute care hospital.

There does not seem to have been any widespread tendency to discharge clients from long term care facilities which they entered with the idea of maintaining their residence there. It is more likely that fewer clients will be admitted in the future because of the greater availability of community support programs such as adult day programs to assist them to maintain community residence. It is also more likely that Home Care is the service which is the first to be requested to provide support to an elderly individual being discharged from an acute care facility. It may well be that adult day programs are used later on, but it is unlikely to be in the convalescent period following an episode of acute illness requiring hospitalization. There were too few clients in this category to be able to draw conclusions about the transition from a long term care or acute care facility to a day program.

PROGRAM OBJECTIVE 2C.1: To provide transitional supportive services and follow-up care to the elderly in order to facilitate early discharge from acute care or long term care facilities.

Data on this objective was gained from program managers and from the qualitative interviews with clients. Facilitating discharge from acute or long term care facilities was one of the lesser reported objectives for day program clients in this study. However, for a select group of adult day program clients programs served a transitional role in a return to the community from acute care centres. "I found out about it [the day program] at the Glenmore Hospital. The occupational therapist was telling me what a nice place it was and that they have lots of activities and she recommended it very highly," stated one client. Another reported, "While I was in the hospital, they'd come up there twice a week. . . . and I would attend it [the day program] from there."

PROGRAM OBJECTIVE 2D: To assist families and other informal caregivers as they care for persons who may otherwise be at risk of institutionalization.

It is quite clear that day programs are providing a great deal of support to the caregivers of frail elderly people in day programs. The Satisfaction with Day Program Scale was completed by caregivers three times following the client's entry into the program. The satisfaction ratings of these individuals were very high, indicating a high level of satisfaction with the program.

Even though responses to the program were on the whole very positive, caregivers offered some suggestions for improvement. A number commented on time restrictions as evidenced by comments such as "the only thing that I do wish would be that he could go more than the once a week" and "had there been more days we would have asked her to be enroled for more days". Another caregiver stated that what they liked least was "probably along the lines of that he's only able to go one day a week, but maybe, you know, that might be selfishness on my part, because I'm sure there are people waiting to get in that don't have the one day a week." Another would have appreciated access to weekend and/or evening hours as evidenced in her comments, "like a Saturday or a Friday night would have been nice, and I think it would be nicer for them [the clients] to socialize on those nights. . . .which would give the caretaker a chance to go out on their own, especially if they are able and well bodied, then they'd want to go out and do something else. Transportation issues were also raised by caregivers. One caregiver stated, "I was running her into town and back, so that's four trips [each week]". Others made comments that the variability in times when DATS arrived to pick up and drop off clients made planning their day's activities more difficult. "I had to be sure that I was back again when he got here," one caregiver responded. Another caregiver talked about the early morning pick-ups. As she stated, "they [the clients] haven't got that get up and go to go and so there were mornings where he just didn't want to go, but then an hour or two later he could have gone, but by then it was too late." Another expressed her concern about having to be in the home when the client was picked up and dropped off because "handi-bus drivers come and go and I don't really know that I trust somebody to come to the door and lock the door behind him and take him to where he's going and bring him home and open up the door for him, that kind of stuff."

Caregivers did appreciate the helpfulness of those providing the transportation as evidenced by the following comments: “These fellows [bus drivers], they just make a nice ending to a full day for the people that are involved," and "even the boys that came for him, you know, in the mornings were all really good. They never left him until he was right inside the door, and I felt they were really good that way with him, you know." It would seem that support for these caregivers is an important factor in maintaining the frail elderly in their homes, and even though they had very little to say that was negative, attention to their suggestions would be an important starting point if one were to increase support for this group of individuals.

The major group of informal caregivers is the spouses of clients, and this represents almost half of all the caregivers, daughters being the next largest group. Spouses are most often elderly themselves and may have serious health problems of their own, while daughters are often dealing with the demands of raising young families, while concurrently providing care for aging parents.

The complexity of situations that these caregivers are dealing with in the community continues to increase. The results of this study clearly show that adult day programs offer one form of support for assisting caregivers to provide for their family member in such a way as to support continued community living. Caregiver support programs, designed to provide an opportunity for sharing trials and successes, as well as in some cases providing educational information, were an integral component of a number of the adult day programs. As one caregiver stated, "there is a caregiver support group and that is a situation in which people are able to talk about, you know, some of the problems they have in common . . . . it's [caregiver support program] been helpful. . . .I know these sessions have given me a different outlook on the way people are trying to help us."

Caregiver outcomes are potentially as important as those for clients, for it is the caregivers who largely make it possible for this group of frail elderly citizens to maintain independent community living. Although it was noted that measures of the impact of caregiver responsibilities did not change over time, caregivers expressed considerable satisfaction with the programs and their impact on the clients and indirectly on themselves. Even though the day program intervention is a relatively small one in terms of the number of hours of client involvement when compared to the total life of the client, it would appear that client attendance at day programs makes it possible for caregivers to continue to assume caregiving responsibilities and to maintain clients in independent living situations. It may well be the case that if programs were accessible by clients for more hours per week including some evening and weekend hours that caregivers could continue in caregiving roles for longer periods of time. It is also possible that more caregivers would be prepared to care for frail elderly relatives or friends in the community in the future if day programs were more available and accessible to clients.

It has been ascertained that the caregivers in this study are themselves elderly. Almost half of the caregivers are over the age of 65, with just over 20% over the age of 75. Clearly elderly family and friends are supporting other elderly family members when they have become frail in terms of their health and social status. Many of the caregivers in this study had assumed very heavy responsibilities in terms of the time commitment and in terms of the nature of the care which they provided. The need to support the caregivers and provide respite for them in order to enhance their ability to carry out their responsibilities would seem to have important outcomes for clients in terms of maintaining their ability to continue with their living arrangements in the community. Children, particularly daughters, were in many instances providing care for their young children as well as their aging parents. Often these women also were engaged in full or part-time employment and shouldered major responsibility for managing households as well.

Transportation was raised as a problem by clients, caregivers, program staff, and referral agency managers throughout the study. The availability of transportation to and from day programs is critical to accessibility of programs to clients and their caregivers. For some programs transportation is available and for others it is not. In rural Alberta, transportation is much less available for the elderly and disabled than it is in urban areas and therefore becomes a greater problem. With the distances which exist between points in rural Alberta, it is a challenge to move the frail elderly to and from the services from which they could benefit. It has been pointed out that caregivers, family members, and friends are providing transportation for approximately one-third of clients. This is clearly not possible in many cases. In order to ensure that transportation to and from programs does not continue to be a barrier to access to programs by clients, attention needs to be directed to providing or making arrangements so that transportation is available to the frail elderly to ensure that programs are truly available to them and their families.

Daily fees to attend programs vary somewhat across programs. Although these are subsidized through government support of day programs, the charges serve as deterrents to program attendance. The impact upon programs of the inability and/or reluctance on the part of clients and their families to pay such fees is considerable. The investigators were unable to obtain a sufficient number of clients for the study in one location because area residents did not take advantage of the program because of the fees. In another area, although a small sample of clients was obtained, client fees served as a primary deterrent to enrolment in the program by the frail elderly. In both of these communities, the proportion of elderly people in the population was quite high and it was clear that there were many potential clients of day programs in the community. In some instances, elderly people were sent to long term care centres rather than taking the intermediate step of a day program, a decision which managers reported was based on the cost of the program to the client.

Clients may well be unique in terms of the fact that they come from ‘hardy’ families who are willing to make the personal sacrifice to ensure that the client is able to participate in a day program. Attention needs to be given to considering how to make the resources of the day program available to a wider group of elderly people who could benefit from the programs. This large group of potential participants do not have caregivers with strong commitments to them and are possibly more vulnerable to being admitted to long term care institutions because of lack of community support. Although the recommendations would enhance programs for the current generation of day program clients and their caregivers, their implementation would do much to remove barriers to program attendance for clients who are not familiar with what community resources are available to them or with how to access them. In addition, there are also elderly people who are their sole means of support and who do not have the strong support from caregivers, families, or friends which has been seen in the clients who have participated in this study. Adult day programs represent a resource which offer that segment of the elderly population whose health is fragile a means of continued monitoring and support. The extension of services to a wider group could produce important social benefits for clients, caregivers and society at large.

Adult day programs are clearly a significant and important resource in Alberta's long term care system. Over the past two decades, a cadre of individuals with varied backgrounds in aging have become involved in developing and operating programs and have acquired skill in working with this group of clients and caregivers. The need for programs has been demonstrated over time by continuing demand from clients and caregivers for such assistance. Adult day programs have largely operated with minimal resources and clients have been expected to contribute to their operation by paying fees. There have been many deterrents to adult day program attendance by clients, but a substantial number have taken advantage of the opportunity and have expressed satisfaction with the experience. The question of the size of the population of potential day program participants whose ability to continue community living could be enhanced is an important one. Because of the factors which make it difficult, if not impossible, for some clients to attend day programs, the current population of day program participants may be a unique one. Because of the effort required to send clients to the program, commitment and dedication to the client are required on the part of caregivers, families and friends of these individuals. Other resources are necessary as well in order to take advantage of programs. One example is financial, as clients are required to pay fees to take part in programs.

SECONDARY OBJECTIVES

The secondary objectives for the project included the following:

a. To contribute to the professional body of knowledge available with respect to policy issues, program issues and client/family/stakeholder issues, and
b. To develop a minimum data set and monitoring indicators to be used to document program utilization and client characteristics over time in Alberta's Adult Day Programs.

The first objective related to contributing to the body of knowledge in this area. Throughout this project a number of presentations have been given at national and international conferences on various aspects of the study. All of the papers presented at scientific conferences, have been selected in a competitive review of abstracts submitted. A list of presentations which have been given and abstracts and full text publications are attached as Appendix Q. This report incorporates all findings and will be of considerable interest to policy makers, practitioners, and academics interested in this area of long term care. Further publications in scientific journals and presentations at conferences are anticipated in order to ensure that what has been learned from this study is widely available to those who wish to review it.

The second objective refers to the development of a minimum data set and monitoring indicators which might be useful in tracking the progress of the frail elderly in day programs. The program, client and caregiver data forms which have been developed for the purposes of this study have been highly useful in giving a profile of this clientele. With some modifications these instruments could be used on an ongoing basis by day programs to monitor clients. It is possible that these could form the basis of a management information system stored on a computerized data base. If each of the day programs had the computer resources for a uniform system they could contribute to the database at suggested intervals and clients could be tracked through the system. The standardized instruments also were very valuable in providing information on the client's functional level, quality of life, and satisfaction with the programs. Administration of these instruments, however, is very time consuming and it is unlikely that it would be feasible to incorporate them into the ongoing operations of programs. However, evaluations using a group of tests of this nature could be carried out at specified intervals if such a review was desired. The following are recommendations derived from analysis of the data collected in this study.

RECOMMENDATIONS

- That day support programs be considered an integral part of the system of long term care and that as they become available in all areas they be included as part of the single point of entry process.

- That day program spaces be expanded for day support programs particularly in urban areas where services currently cannot be offered to the total population which could benefit from them.

- That present day hospital programs be maintained in the urban areas in which they are located and that they continue to offer assessment, treatment, and rehabilitation.

- That day support programs be offered on a regional basis throughout the province to ensure that services are available to those who could benefit from program attendance.

- That resources be made available to programs in order to allow them to provide greater flexibility in scheduling hours of participation in day program attendance, including drop-in availability, as well as more varied activities to meet the individual needs of clients.

- That day programs be considered a resource to provide respite for informal caregivers and that programs be given the means to offer more weekly hours of client participation including some evening and weekend hours.

- That modest or negligible change in client outcomes in terms of their health and social functioning over a period of day program attendance be considered a successful intervention in terms of its importance in supporting the client in maintaining health and social status necessary for continued community living.

- That day programs be offered resources to expand their informal caregiver support programs in order to allow them to identify and monitor needs of informal caregivers on an ongoing basis and to offer assistance where needed.

- That resources be provided to ensure that transportation systems are an integral part of day programs for clients who need health and social support and whose residence in the community could be maintained through day program attendance.

- That further study of client fees be carried out to ensure that a financial incentive does not exist which encourages people to enter long term care centres rather than using an intermediate resource such as a day program to assist them to remain in the community.

- That a reporting system with uniform definitions and categories for day program revenues and expenditures be put in place to ensure more accuracy and comparability in tracking program costs.

- That standards for day programs, which reflect the day hospital/day support typology confirmed in this study, be developed and implemented across all day programs.

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APPENDICES

APPENDIX A: CONSENT FORMS

CONSENT FORM
(for program manager/director)

Project Title: **Evaluation of Adult Day Programs in Alberta**

Investigators:

Janet Ross Kerr RN, PhD
Professor, Faculty of Nursing
University of Alberta
492-6253

Anita E. Molzahn, RN, PhD
Associate Professor, Faculty of Nursing
University of Alberta
492-6279

Sharon Warren, PhD
Associate Professor, Faculty of Rehabilitation Medicine
University of Alberta
492-7856

I understand that the purpose of this project is to evaluate adult day programs in Alberta. I will be asked to answer a number of questions that relate to the program. About 90 minutes of my time will be required to do this. I will inform clients in the program that the study is being done and asking clients to let me know if they are willing to participate. I will also provide the researchers with access to the files of clients who have agreed to participate.

My name and the names of clients in the program will not be used in any report or talk about the project. Only a code number will appear on any forms or question sheets. However, I recognize that it may be possible to identify that I have participated in the study from the information provided about the program. All records about this project will be kept in a locked filing cabinet. Only the researchers will be able to see the records.

There are no risks to my participation in the study. If the researchers find out that a client or another person associated with the program has been harmed, it will be necessary to report these findings to appropriate people. If this happens, I will be told who will be notified. The information obtained from this study may benefit others who join day programs in the future.

My participation in the study and responses to questions are voluntary. I may withdraw from the study at any time by notifying the researchers.

If the information obtained in the study is used for another purpose, permission will first be obtained from an ethics committee.

Signature of Participant	Date
Signature of Researcher	Date

CONSENT FORM
(for clients)

Project Title: Evaluation of Adult Day Programs in Alberta

Investigators:

Janet Ross Kerr RN, PhD
Professor, Faculty of Nursing
University of Alberta
492-6253

Anita E. Molzahn, RN, PhD
Associate Professor, Faculty of Nursing
University of Alberta
492-6279

Sharon Warren, PhD
Associate Professor, Faculty of Rehabilitation Medicine
University of Alberta
492-7856

I understand that the purpose of this project is to evaluate adult day programs in Alberta. I will be asked to complete four brief questionnaires on up to five occasions (if possible on two occassions prior to entering the day program, upon admission into a day program, and then two and six months following admission into the program). About 30 minutes of my time will be required to do this on each occasion.

My file/chart will be used to collect information about me and the reasons I am in this program. I will provide the name of a family member or friend who helps me to the researchers so that they can talk to them about the day program.

My name will not be used in any report or talk about the project. Only a code number will appear on any forms or question sheets. All records about this project will be kept in a locked filing cabinet. Only the researchers will be able to see the records.

The study poses no risks to me. If the researchers find out that I or another person has been harmed, it will be necessary to report these findings to appropriate people. If this happens, I will be told who will be notified. The information obtained in the study may benefit others who join day programs in the future.

I can withdraw from the study at any time. I can refuse to answer any questions. Withdrawing from the study will not affect my care in any way. I can withdraw by phoning one of the researchers or by telling them that I do not wish to participate.

If the information obtained in the study is used for another purpose, permission will first be obtained from an ethics committee.

Signature of Participant	Date
Signature of Researcher	Date

CONSENT FORM
(for informal caregivers)

Project Title: Evaluation of Adult Day Programs in Alberta

Investigators:

Janet Ross Kerr RN, PhD
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Anita E. Molzahn, RN, PhD
Associate Professor, Faculty of Nursing
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Sharon Warren, PhD
Associate Professor, Faculty of Rehabilitation Medicine
University of Alberta
492-7856

I understand that the purpose of this project is to evaluate adult day programs in Alberta. I will be asked to complete two brief questionnaires on up to five occassions (if possible on two occassions prior to entering the day program, upon admission into a day program, and then two and six months following admission into the program). About 15 minutes of my time will be required to do this on each occassion.

My name or the name of the person in the program will not be used in any report or talk about the project. Only a code number will appear on any forms or question sheets. All records about this project will be kept in a locked filing cabinet. Only the researchers will be able to see the records.

There are no risks to my participation in the study. If the researchers find out that I or another person have been harmed, it will be necessary to report these findings to appropriate people. If this happens, I will be told who will be notified. The information obtained may benefit others who join day programs in the future.

I can withdraw from the study at any time. I can refuse to answer any questions. Withdrawing from the study will not affect the care of my friend or family member in any way. I can withdraw by phoning one of the researchers or by telling them that I do not wish to participate.

If the information obtained in the study is used for another purpose, permission will first be obtained from an ethics committee.

Signature of Participant ______________________ Date ______________

Signature of Researcher ______________________ Date ______________

APPENDIX B: PROGRAM DATA FORM AND REFERRAL AGENCY DATA FORM

PROGRAM DATA FORM

Program Code Number: _____

How long has this program been in operation _____ (in months)

Type of program: day hospital _____
day support _____

Where is the program located?
_____ - as part of an institution
_____ - free standing

Describe the geographic location of the program.

Number of clients in the program: _____

Total number of client days in the last fiscal year: _____

Is there a waiting list for the program?
1 = no
2 = yes

If yes, what is the number of persons presently on the waiting list? _____

Average time on waiting list: (in weeks) _____

Number of openings for new clients at this time: _____

Maximum number of clients in the program at one time: _____

Average length of client stay in the program: _____ (in weeks)

Total Number of Staff Employed: _____ FTEs: _____

Number of Staff in Each Category (list in FTEs)

Manager/Administrator: ____________________
Registered Nurses: ____________________
Licensed Practical Nurses: ____________________
Physiotherapists: ____________________
Occupational Therapists: ____________________
Physicians: ____________________
Recreation Therapists: ____________________
Total number of aides: ____________________
Nursing aides: ____________________
Personal care aides: ____________________
Home Support aides: ____________________
Recreation aides: ____________________
Other staff: (Please specify) ____________________
____

Volunteers: Total number ____________________
Total # of volunteer hours/ week (on average) ____________________

Times of operation (opening, closing)

Monday ____________________
Tuesday ____________________
Wednesday ____________________
Thursday ____________________
Friday ____________________
Saturday ____________________
Sunday ____________________

Services Offered in Program: (please circle all that apply)

1 - Physiotherapy
2 - Occupational Therapy
3 - Nursing
4 - Personal Care
5 - Recreational Therapy
6 - Socialization
7 - Social Services
8 - Podiatrist/Foot care
9 - Pastoral care
10 - Caregiver Support Group
11 - Psychologist/Psychiatrist
12 - Nutritionist/Dietary
13 - Pharmacist
14 - Case Coordination
15 - Physicians - list specialty(ies) ____________________
____
16 - Other (please specify) ____________________
____

Describe the roles of staff employed in the program
(attach job descriptions if available)

Describe the roles of volunteers in the program

Number of clients admitted to the program in the last 12 months:

______ From Community
______ From Long Term Care Institutions
______ From Acute Care Institutions
______ From other day programs
______ Total number admitted to the program in the last 12 months.

In the last 12 months, numbers of clients referred from the following sources:
______ Long Term Care Facilities
______ Acute Care Facilities
______ Physicians
______ Community Programs (FCSS and Home Care)
______ Family Members
______ Self Referral

Number of clients referred but not admitted to the program in the last 12 months: ______

Reasons why these clients were not admitted:

What are the admission criteria for the program?

What criteria are used to discharge clients from the program?

Number of clients discharged from the program?
_____ in the last 6 months
_____ in the last 12 months

Number of clients admitted to long term care facilities?
_____ in the last 6 months
_____ in the last 12 months

Number of clients admitted to acute care hospitals?
_____ in the last 6 months
_____ in the last 12 months

Number of deaths of clients in your program?
_____ in the last 6 months
_____ in the last 12 months

What are the unique features of your program and the services you provide to clients?

What is the level of cooperation/coordination between your program and other programs providing services in the community?

Do you think Single Point of Entry has had any effect on your program?

_____ no
_____ yes - What effect?

Who does "case coordination" for clients in your program?

Is the program advertised? _____ no
_____ yes How?

Describe the community in which the program operates:

Population of town/city: ___________________

Other services available in town/city: (please circle all that apply)

1 - Physiotherapy
2 - Coordinated Home Care
  a. homemaker
  b. handyman
  c. nursing
  d. other (please specify) ______________________
  ____
3 - Podiatrist/footcare
4 - Social services
5 - Meals-on-Wheels
6 - Psychologist/Psychiatrist
7 - Alberta Mental Health Services
8 - Occupational therapy
9 - Lifeline
10 - Homemaker (not through home care)
11 - Handyman (not through home care)
12 - VON/Nursing (not through home care)
13 - Physician(s) list specialties
  ____
  ____
14 - Other (please specify) _________________________

What is your assessment of the need for this program in the community?

In your opinion, have appropriate clients been attracted to the program? Please explain:

Does the program fill a gap in services in the community? If so, how?

In your opinion as the program manager what are the perceived strengths of the program?

What are the perceived weaknesses of the program?

What are the common problems/issues encountered in the program?

Annual program costs in the last fiscal year:
specify dates ____________________

___________ Rental of location
___________ Staff salaries
___________ Equipment
___________ Supplies
___________ Other (please specify)

___________ Total cost of program

Is there a charge to clients for attending the program?

1 = no
2 = yes

Is this charge?
For meals
1 = no
2 = yes

For transportation
1 = no
2 = yes

If so, what is the charge per day _______

Sources and amounts of revenue (last fiscal year):

___________ Government
___________ Client Fees
___________ Private Individual Donations
___________ Organizational Donations
___________ Bequests
___________ From Associated Institution
___________ Other revenue (please explain)

Other relevant information about costs:

If additional funds were available, how would you use them?

In general, how has the program affected:

1. clients
2. informal caregivers
3. home care utilization
4. hospital, nursing home, other facility utilization and waitlists
5. other long term care or health services

QUESTIONNAIRE FOR REFERRAL AGENCIES

Name of Agency: ______________________

1. To what Adult Day Programs do you refer clients?
(use back of page if insufficient room)

Name of Program	Average Number of Clients Referred Per Month
______________________	____________
______________________	____________
______________________	____________
______________________	____________
______________________	____________
______________________	____________

2. What services of Adult Day Programs do you feel are most beneficial for your clients?

3. What other services, not now available through Adult Day Programs in your area, do you feel would be of benefit to your clients?

4. Have clients served by your agency had any difficulty accessing Adult Day Programs? If yes, please explain.

5. How is information between your agency and the Adult Day Program communicated? Have there been any difficulties? Please explain.

6. What would make the Adult Day Programs in your area better?

Any additional comments:

Thank you again for your time and cooperation in completing this questionnaire. Please return it in the stamped self-addressed envelope provided at your earliest convenience.

APPENDIX C: CLIENT INFORMATION FORM

CLIENT INFORMATION FORM

TO BE COMPLETED BY STAFF IN DAY PROGRAM FOR ALL CLIENTS

DATE: ______________________________

DAY PROGRAM SITE: ___________________________

CLIENT A.H.C.I.P. NUMBER: _______________________________

PLEASE CIRCLE THE CORRECT NUMBERS BELOW, OR FILL IN THE BLANKS AS APPROPRIATE.

GENDER

0 - Male

1 - Female

DATE OF BIRTH

____/____/____

Year Month Day

MARITAL STATUS

1 - Never Married

2 - Married

3 - Widowed

4 - Separated

5 - Divorced

6 - Common-Law

EDUCATION

1 - No Formal

2 - Grades 1-6

3 - Grades 7-9

4 - Grades 10-12

5 - Post Secondary

RESIDENCY

1 - Rural Community

2 - Urban (City)

3 - Farm

LAST OR PRESENT OCCUPATION(S)

____

LANGUAGE OF CHOICE

1 - English

2 - Other (Please specify) ______________________

PLACE OF RESIDENCE

1 - Private Home

2 - Apartment

3 - Lodge

4 - Nursing Home

5 - Auxiliary Hospital

6 - Combined Nursing Home/Auxiliary Hospital

7 - Other (please specify) ______________________

HOW LONG AT CURRENT RESIDENCE?

____________________ (In Months)

LIVING ARRANGEMENTS

1 - Lives Alone

2 - Lives with Spouse/Partner

3 - Lives with Other Family Member(s)

4 - Other (please specify) ____________________________________

IS CURRENT PHYSICAL ACCOMMODATION ADEQUATE/ APPROPRIATE (IN THE CLIENT'S OPINION)?

0 - No

1 - Yes

If no, why? ____

SOURCES OF INCOME (FROM GOVERNMENT)

(Mark all that apply)

_____ Social Assistance

_____ A.A.I.S.H. (Alberta Assured Income for the Severely Handicapped)

_____ Widow's Allowance

_____ Canada Pension Plan

_____ Old Age Security

_____ G.I.S. (Guaranteed Income Supplement)/A.A.I.P. (Alberta Assured Income Plan)

_____ Other government income (please specify) ____________________________

LEGAL DECISION-MAKING STATUS

(Mark all that apply)

_____ Not under Guardianship/Trusteeship/Power of Attorney

_____ Under Guardianship

_____ Under Trusteeship

_____ Under Power of Attorney

DIAGNOSES

(List appropriate current diagnoses using the attached appendix (up to five).

____

____

____

____

____

LIST OF MEDICATIONS (PRESCRIPTION AND NON-PRESCRIPTION)

1 - ____

2 - ____

3 - ____

4 - ____

5 - ____

6 - ____

7 - ____

If there are additional medications, please list them on the back of this sheet.

NUMBER OF DAYS IN ACUTE CARE HOSPITAL IN LAST 12 MONTHS

_______________(Days)

NUMBER OF DAYS IN LONG TERM CARE FACILITIES IN LAST 12 MONTHS

_______________(Days)

NUMBER OF VISITS TO PHYSICIAN IN LAST YEAR

_______________(Visits)

NUMBER OF FALLS IN LAST YEAR

_______________(Falls)

DOES THIS CLIENT UTILIZE COMMUNITY SUPPORT SERVICES?

0 - no 1 - yes
If yes, please mark all community support services utilized by this client from the list below.

____ Physiotherapy

____ Coordinated Home Care

____ a) Homemaker ____ b) Handyman ____ c) Nursing ____ d) Other

____ Podiatrist/Foot Care

____ Social Services

____ Meals-On-Wheels

____ Psychologist/Psychiatrist

____ Alberta Mental Health Services

____ Occupational Therapy

____ Lifeline

____ Homemaker (Not through Home Care)

____ Handyman (Not through Home Care)

____ VON/Nursing (Not through Home Care)

____ Physician(s) (List specialties) ______________________________

____ Other (Please specify) ______________________________

PRIMARY INFORMAL CAREGIVER

01 - None

02 - Spouse/Partner

03 - Daughter

04 - Son

05 - Son-in-law

06 - Daughter-in-law

07 - Sibling

08 - Parent

09 - Other Family Member

10 - Friend

11 - Neighbor

12 - Other (please specify)

IS CAREGIVER FRAIL?

0 - No

1 - Yes

DOES THE CAREGIVER HAVE HEALTH PROBLEMS?

0 - No

1 - Yes

CHRONIC ILLNESS OF SPOUSE/PARTNER/FAMILY MEMBER LIVING WITH CLIENT

0 - No

1 - Yes If yes, please explain. ______________________________

____

TERMINAL ILLNESS OF SPOUSE/PARTNER/FAMILY MEMBER LIVING WITH CLIENT (AT PRESENT)

0 - No

1 - Yes

DOES THIS CLIENT HAVE HANDICAPPED DEPENDENTS?

0 - No

1 - Yes If yes, please explain. ____

RECENT DEATH(S) OF A SPOUSE/PARTNER/RELATIVE/FRIEND WITHIN ONE YEAR

0 - No

1 - Yes (If yes, complete the next three questions)

a) How long ago? ________________________________

b) Relationship to client ___________________________

c) Did this client live with the deceased?

0 - No

1 - Yes

HOW OFTEN DOES CLIENT HAVE TELEPHONE CONTACT WITH FAMILY MEMBERS OTHER THAN THE PERSON(S) LIVING WITH THE CLIENT?

1 - At Least Daily

2 - At Least Weekly

3 - At Least Twice a Month

4 - At Least Monthly

5 - Other (please specify) ________________________________

HOW OFTEN DOES CLIENT HAVE FACE-TO-FACE CONTACT WITH FAMILY MEMBERS OTHER THAN THE PERSON(S) LIVING WITH THE CLIENT?

1 - At Least Daily

2 - At Least Weekly

3 - At Least Twice a Month

4 - At Least Monthly

5 - Other (please specify)

DOES CLIENT HAVE PROBLEMS WITH SUBSTANCE ABUSE?

0 - No

1 - Yes If yes, please explain. ________________________________

DOES CLIENT HAVE HISTORY OF PSYCHIATRIC/EMOTIONAL PROBLEMS?

0 - No

1 - Yes If yes, please explain. ________________________________

PLEASE OBTAIN THE FOLLOWING INFORMATION FROM LAST COMPLETED AAPI. IF NO AAPI IS AVAILABLE OR IF THE INFORMATION ON THE AAPI IS OUTDATED PLEASE ANSWER QUESTIONS AND INDICATE IF YOU ARE AAPI TRAINED OR NOT.

AAPI COMPLETED FOR THIS CLIENT: 0 - No
1 - Yes

IF YES, DATE LAST AAPI WAS COMPLETED: ____________________

SOURCE OF INFORMATION FOR FOLLOWING AAPI QUESTIONS:

1. FROM LAST COMPLETED AAPI _______________
2. CURRENT ASSESSMENT BY AAPI TRAINED PERSON_______________
3. CURRENT ASSESSMENT BY NON-AAPI TRAINED PERSON_______________

CIRCLE THE APPROPRIATE RESPONSES IN THE FOLLOWING SECTION THAT BEST DESCRIBE YOUR CLIENT'S STATUS:

INEFFECTIVE COPING (AAPI, p. 16)

Ineffective coping refers to the person's ability, or lack of ability, to deal with emotional and physical stress. Review such items as depression, anxiety, suspicion, agitation, etc.

1 No intervention required.
2 Intervention required, but less frequently than once a week.
3 Intervention required and more frequently than once a week, but less than every day.
4 Intervention required lasting less than 30 minutes in a 24 hour period.
5 Intervention required lasting 30 minutes, or up to two hours in a 24 hour period.
6 Intensive (one to one) intervention required lasting two hours or more in a 24 hour period

POTENTIAL FOR INJURY TO SELF AND OTHERS (AAPI, p. 16)

Potential for injury to self and others includes all factors that place the applicant at risk for psychosocial or physical injury to self or others. Review such items as memory, suicidal risk, wandering, aggressiveness, etc.

Self	Others	
1	1	No intervention required.
2	2	General observation required less frequently than once every 24 hours, but at least twice a week.
3	3	General observation and/or intermittent intervention required at least once every 24 hours.
4	4	General observation and/or intermittent intervention required at least two times in each 24 hour period.
5	5	General observation and intermittent intervention required more than two times a day, but less frequently than every hour.
6	6	Close observation and intermittent intervention required hourly or more often, but less than every 15 minutes.
7	7	Close and constant intervention required every 15 minutes or more often.

ELIMINATION (AAPI, p. 7)

(Mark those that apply)

____ Stress Incontinence

____ Urinary Incontinence

____ Bowel Incontinence

MANAGEMENT OF ELIMINATION

1 No alteration.
2 Alteration: manages care independently.
3 Able to manage with assistance to set up.
4 Able to manage with some supervision/assistance; applicant participates.
5 Unable to manage, needs constant supervision/assistance.

URINARY/BOWEL MANAGEMENT

(Mark those that apply)

____ Bladder Routine

____ Bowel Routine

____ Indwelling Urethral Catheter

____ Suprapubic Catheter

____ Colostomy

____ Ileostomy

____ Ureterostomy

MANAGEMENT OF URINARY/BOWEL MANAGEMENT

1 No alteration.
2 Alteration: manages care independently.
3 Able to manage with assistance to set up.
4 Able to manage with some supervision/assistance; applicant participates.
5 Unable to manage, needs constant supervision/assistance.

PERSONAL CARE (AAPI, p. 10)

Eating	Dressing	Toileting	
1	1	1	Independent.
2	2	2	Independent with special devices.
3	3	3	Able to manage with assistance to set up.
4	4	4	Able to manage with some supervision/assistance; applicant participates.
5	5	5	Unable to manage, needs constant supervision/assistance of one person.
6	6	6	Unable to manage, needs constant supervision/assistance of two persons.

MOBILITY (AAPI, p. 10)

Transfer

1 Independent.
2 Independent with equipment.
3 Able to manage with assistance to set up.
4 Able to manage with some supervision/assistance for safety and encouragement; applicant participates.
5 Unable to manage, needs constant supervision/assistance of one person.
6 Unable to manage needs constant supervision and/or physical support of two persons.

ADMISSION DATE TO DAY PROGRAM

____/____/____

Year Month Day

MODE OF ADMISSION

1 - Walking

2 - Wheelchair

3 - Stretcher

DOES CLIENT USE AMBULATION DEVICES (i.e., CANE, WALKER)?

0 - No

1 - Yes (Please specify type) ______________________________

REFERRAL BY:

01 - Self

02 - Spouse/Partner/Family

03 - Physician

04 - Coordinated Home Care Program

05 - Community Health Nurse

06 - Neighbor/Friend

07 - Other Day Program (Please specify)

08 - Acute Care Hospital

09 - Nursing Home

10 - Auxiliary Hospital

11 - Alberta Hospital Edmonton or Ponoka

12 - Other (Please specify) _______________________

SOURCE OF CLIENT INFORMATION ON ADMISSION TO THE DAY PROGRAM

1 - Self	2 - Spouse/Partner/Family
3 - Friend	4 - Other (Please specify) ____________________________

METHOD OF TRANSPORTATION TO THE DAY PROGRAM

1 - Private Vehicle	2 - Handibus/Disabled Transportation System
3 - Taxi	4 - Other (Please specify) ____________________________

TRANSPORTATION PAID BY:

1 - Program 2 - Client/Family

3 - Other (please specify) ____

PLEASE CHECK OFF ALL OF THE ADULT DAY PROGRAM OBJECTIVES THAT ARE APPROPRIATE FOR THIS CLIENT:

____ Encourage and support continued community living of client.
____ Facilitate discharge from a long term care facility or acute care hospital.
____ Provide respite for families and other informal caregivers.
____ To conduct comprehensive multidisciplinary assessments and clinical investigations of the client.
____ To provide **short term** treatment directed toward improving or maintaining the client's level of physical, social, mental, and emotional functioning.
____ To provide **ongoing** care directed toward improving or maintaining the individual's level of physical, functional, social, mental, and emotional functioning.
____ To provide health and support services which prevent or delay institutionalization.
____ To provide services within the continuum of long term care which complement and maximize the use of Home Care and other community service providers.

SERVICES CLIENT RECEIVES FROM THE ADULT DAY PROGRAM

(Mark all that apply)

____ Physiotherapy
____ Nursing
____ Recreational Therapy
____ Social Services
____ Pastoral Care
____ Psychologist/Psychiatrist
____ Pharmacist
____ Physicians - List Specialties

____ Occupational Therapy
____ Personal Care
____ Socialization
____ Podiatrist/Footcare
____ Caregiver Support Group
____ Nutritional/Dietary
____ Case Coordination
____ Other (Please specify) ______________________

ANTICIPATED LENGTH OF STAY IN THE PROGRAM (IN MONTHS)

____________ (Months)

NUMBER OF DAYS CLIENT ATTENDING THE PROGRAM/WEEK

____________ (Days)

NUMBER OF HOURS CLIENT SPENDS IN DAY PROGRAM/WEEK

____________ (Hours)

LIST THE GOALS OF TREATMENT FOR THIS CLIENT WHILE ATTENDING DAY PROGRAM.

1. ____
2. ____
3. ____
4. ____
5. ____
6. ____
7. ____
8. ____

LIST ADDITIONAL TREATMENT GOALS ON THE BACK.

WHAT CLINICAL SERVICES ARE REQUIRED BY THE CLIENT THAT CAN NOT BE MET BY THE DAY PROGRAM OR OTHER EXISTING SERVICES IN THE COMMUNITY?

____

____

____

APPENDIX D: SATISFACTION WITH DAY PROGRAM SCALE

SATISFACTION WITH DAY PROGRAM SCALE

Client ______ Caregiver ______

Please circle the response indicating how satisfied you are with the program. Please keep in mind both the quality and quantity (when appropriate) of the item when you are answering each question.

1. **Amount of Time Spent in program**

Very Dissatisfied
Dissatisfied
No Opinion
Satisfied
Very Satisfied

2. **Transportation to/from program**

Very Dissatisfied
Dissatisfied
No Opinion
Satisfied
Very Satisfied

3. **Food/meals provided**

Very Dissatisfied
Dissatisfied
No Opinion
Satisfied
Very Satisfied

4. **Number of staff available in the program**

Very Dissatisfied
Dissatisfied
No Opinion
Satisfied
Very Satisfied

5. **Types of services provided**

Very Dissatisfied
Dissatisfied
No Opinion
Satisfied
Very Satisfied

6. **Emotional support provided**

Very Dissatisfied
Dissatisfied
No Opinion
Satisfied
Very Satisfied

7. **Program overall**

Very Dissatisfied Dissatisfied No Opinion Satisfied Very Satisfied

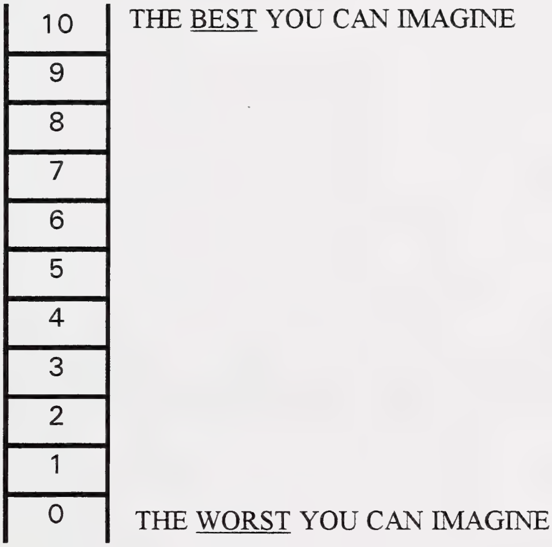
8. **What do you like best about the program?**

9. **What do you like least about the program?**

10. **Are there any further comments you wish to make about the day program?**

APPENDIX E: SELF-ANCHORING STRIVING SCALE

THE SELF-ANCHORING STRIVING SCALE



Here is a picture of a ladder. At the top of the ladder is the best life you can imagine -- the ideal life. At the bottom of the ladder is the worst life you can imagine.

WHERE ON THE LADDER WOULD YOU PLACE:

_____ 1. Your present life
_____ 2. Your life when it was the best it has ever been
_____ 3. The life you had last year
_____ 4. The life you expect to have in one year

APPENDIX F: INDEX OF WELL BEING

INDEX OF WELL BEING

Here are some words and phrases which we would like you to use to describe how you feel about your present life. For example, if you think your present life is very "boring", put an **X** on the line right next ot the word "boring". If you think it is very "interesting", put an **X** on the line right next to the word "interesting". If you think it is somewhere in between, put an **X** where you think it belongs. Put an **X** on one line for each question.

Boring ____ ____ ____ ____ ____ ____ ____ Interesting

Enjoyable ____ ____ ____ ____ ____ ____ ____ Miserable

Easy ____ ____ ____ ____ ____ ____ ____ Hard

Useless ____ ____ ____ ____ ____ ____ ____ Worthwhile

Friendly ____ ____ ____ ____ ____ ____ ____ Lonely

Full ____ ____ ____ ____ ____ ____ ____ Empty

Discouraging ____ ____ ____ ____ ____ ____ ____ Hopeful

Tied Down ____ ____ ____ ____ ____ ____ ____ Free

Disappointing ____ ____ ____ ____ ____ ____ ____ Rewarding

Brings out the best in me ____ ____ ____ ____ ____ ____ ____ Doesn't give me much chance

How satisfied are you with your life as a whole these days?

Not at all satisified ____ ____ ____ ____ ____ ____ ____ Very satisfied

APPENDIX G: QUALITY OF LIFE INDEX

QUALITY OF LIFE INDEX

Please score each heading 2, 1 or 0 according to how you feel, using the rating scale on the right.

ACTIVITY	During the last week, I:	
	-have been working or studying full time, or nearly so, in my usual occupation, managing my own household or participating in unpaid voluntary activities, whether retired or not	2
	-have been working or studying in my usual occupation or managing my own household or participating in unpaid voluntary activities BUT require major assistance OR have had a significant reduction in hours worked OR was on sick leave	1
	-have not been working or studying in any capacity and not managing my own household	0
DAILY LIVING	During the last week, I:	
	-have been self reliant in eating, washing, toileting and dressing, using public transport or driving my own car	2
	-have required assistance (another person or special equipment) for daily activities and transport but am able to perform light tasks	1
	-have not been managing personal care nor light tasks and/or have not been leaving own home or the hospital at all	0
HEALTH	During the week, I:	
	-have been feeling well most of the time	2
	-have been lacking energy or not feeling entirely “up to par” more than occasionally	1
	-have been feeling very ill or “lousy”, seeming weak and washed out most of the time	0
SUPPORT	During the last week, I:	
	-have been having good relationships with others and receiving strong support from at least one family member and/or friend	2
	-support received from family and friends has been limited	1
	-support from family and friends occurred infrequently or only when absolutely necessary	0

OUTLOOK	During the last week, I:	
	-have felt calm and felt positive about my future and felt in control of my personal circumstances	2
	-have sometimes been troubled because I am not fully in control of my personal circumstances OR have had periods of anxiety or depression	1
	-have been seriously confused or very frightened or consistently anxious and depressed	0

APPENDIX H: PERCEIVED HEALTH STATUS

How would you rate the overall state of your health at the present time? (Circle).

Excellent

Very Good

Good

Fair

Poor

How would you rate the overall state of your health five years ago? (circle)

Excellent

Very Good

Good

Fair

Poor

APPENDIX I: MULTIDIMENSIONAL FUNCTIONAL ASSESSMENT (OLDER AMERICANS RESOURCE AND SERVICES QUESTIONNAIRE)

CLIENTS PHYSICAL IMPAIRMENT (OARS)

A. Instrumental ADL

1. Can you use the telephone...

1. without some help, including looking up numbers and dialing
2. with some help, (can answer phone or dial operator in an emergency, but need a special phone or help in getting the number or dialing)
3. or are you completely unable to use the telephone

2. Can you get to places out of walking distances...

1. without help (can travel alone on buses, taxis, or drive your own car)
2. with some help (need someone to help you or go with you when traveling)
3. or unable to travel unless arrangements are made for a specialized vehicle like a disabled transportation system

3. Can you go shopping for groceries or clothes (assuming you have transportation)...

1. without help (taking care of shopping needs yourself, assuming you have transportation)
2. with some help (need someone to go with you on all shopping trips)
3. or are you completely unable to do any shopping

4. Can you prepare your meals...

1. without help (plan and cook full meals)
2. with some help (can prepare some things but unable to cook full meals)
3. completely unable to prepare any meals

5. Can you do housework...

1. without help (can scrub floors, etc.)
2. with some help (can do light housework but need help with heavy work)
3. or are you completely unable to do any housework

6. Can you take your own medicine...

1. without help (the right doses at the right time)
2. with some help (able to take medicine if prepared for you and/or reminded to take it)
3. or are you completely unable to take your medicine

7. Can you handle your own money...

1. without some help (write cheques, pay bills, etc.)
2. with some help (manage day-to-day buying, need help managing cheque book and paying bills)
3. or are you completely unable to handle money

B. Physical ADL

8. Can you eat...

1. without help (able to feed yourself completely)
2. with some help (need help for cutting, etc.)
3. completely unable to feed yourself

9. Can you dress and undress...

1. without help (able to pick out clothes, dress and undress yourself)
2. with some help
3. completely unable to dress and undress yourself

10. Can you take care of your own appearance, for example, combing hair and shaving...

1. without help
2. with some help
3. completely unable to maintain your appearance

11. Can you walk...

1. without help (except for a cane)
2. with some help from a person
3. or are you completely unable to walk

12. Can you get in and out of bed...

1. without any help at all
2. with some help (from a person)
3. or are you totally dependent on someone else to lift you

13. Can you take a bath or shower...

1. without help
2. with some help (need help getting in and out of the tub, or need special attachments on tub)
3. or are you completely unable to bathe yourself

14. Do you manage toileting...

1. without help
2. with some help can manage to use the bathroom on time
3. are generally incontinent

APPENDIX J: MINI-MENTAL STATUS QUESTIONNAIRE

THE MENTAL STATUS QUESTIONNAIRE

Following are ten questions. If the person accurately answers the question, a score of 1 is given for that question. The total score is summed and tabulated from a total of 10. Read each question carefully and allow the respondent time to answer. Jot down the respondent's answer to allow for verification of scoring.

	Score
1. What is the name of this place? ______________________	____
2. Where is it located? ______________________	____
3. What day is today? ______________________	____
4. What month is it now? ______________________	____
5. What year is it now? ______________________	____
6. How old are you? ______________________	____
7. In what month were you born? ______________________	____
8. In what year were you born? ______________________	____
9. Who is the prime minister of Canada now? ______________________	____
10. Who was the previous prime minister? ______________________	____
Total Score	____

Date: ______________________

Interviewer: ______________________

APPENDIX K: MEMORY AND BEHAVIOR PROBLEMS CHECKLIST

MEMORY AND BEHAVIOR PROBLEMS CHECKLIST

INSTRUCTIONS TO CAREGIVER:
"I am going to read you a list of common problems. Tell me if any of these problems have occurred during the past week. If so, how often have they occurred? If not, has this problem ever occurred?"

	BEHAVIORS	FREQUENCY					
1.	Asking the same question over and over again	0	1	2	3	4	5
2.	Trouble remember recent events (e.g., items in the newspaper, on tv)	0	1	2	3	4	5
3.	Trouble remembering significant events from the past	0	1	2	3	4	5
4.	Mixing up past and present (e.g., thinking a deceased parent is alive)	0	1	2	3	4	5
5.	Losing or misplacing things	0	1	2	3	4	5
6.	Hiding things	0	1	2	3	4	5
7.	Unable to find way about indoors	0	1	2	3	4	5
8.	Unable to find way about outdoors, for example on familiar streets	0	1	2	3	4	5
9.	Wandering or getting lost	0	1	2	3	4	5
10.	Not recognizing a familiar place	0	1	2	3	4	5
11.	Not recognizing familiar people	0	1	2	3	4	5
12.	Not recognizing a familiar object	0	1	2	3	4	5
13.	Forgetting what day it is	0	1	2	3	4	5
14.	Unable to start activities by self (besides ADL's)	0	1	2	3	4	5
15.	Unable to keep occupied or busy	0	1	2	3	4	5
16.	Follows you around	0	1	2	3	4	5
17.	Being constantly restless or agitated	0	1	2	3	4	5
18.	Spending long periods of time inactive	0	1	2	3	4	5
19.	Being constantly talkative	0	1	2	3	4	5
20.	Talking little or not at all	0	1	2	3	4	5
21.	Being suspicious or accusative	0	1	2	3	4	5
22.	Embarrassing you in public	0	1	2	3	4	5
23.	Waking you up at night	0	1	2	3	4	5
24.	Appears sad or depressed	0	1	2	3	4	5

25.	Appears anxious or worried	0	1	2	3	4	5
26.	Becomes angry	0	1	2	3	4	5
27.	Strikes out or tries to hit	0	1	2	3	4	5
28.	Destroying property	0	1	2	3	4	5
29.	Engaging in behavior that is potentially dangerous to others or self	0	1	2	3	4	5
30.	Seeing or hearing things that are not there (hallucinations or illusions)	0	1	2	3	4	5
31.	Any other problems (specify) ________________________ ________________________	0	1	2	3	4	5
32.	Any other problems (specify) ________________________ ________________________	0	1	2	3	4	5

Scale:

0 = never occurred
1 = occurred frequently in the past, but not in the past three months
2 = has occurred recently, but not in the past week
3 = has occurred 1 or 2 times in the past week
4 = has occurred 3 to 6 times in the past week
5 = occurs daily or more often

APPENDIX L: CAREGIVER BURDEN INVENTORY

CAREGIVER BURDEN INVENTORY

1. My ______________ needs my help to perform many daily tasks.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

2. My _____________ is dependent on me.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

3. I have to watch my ____________ constantly.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

4. I have to help my ____________ with many basic functions.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

5. I don't have a minute's break from caregiving chores.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

6. I feel that I am missing out on life.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

7. I wish I could escape from this situation.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

8. My social life has suffered.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

9. I feel emotionally drained due to caring for my _______________.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

10. I expected that things would be different at this point in my life.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

11. I'm not getting enough sleep.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

12. My health has suffered.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

13. Caregiving has made my physically sick.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

14. I'm physically tired.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

15. I don't get along with other family members as well as I used to.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

16. My caregiving efforts aren't appreciated by others in my family.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

17. I've had problems with my marriage.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

18. I don't do as good a job at work as I used to.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

19. I feel resentful of other relatives who could but do not help.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

20. I feel embarassed over my _____________ behavior.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

21. I feel ashamed of my ________________ .

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

22. I resent my ______________ .

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

23. I feel uncomfortable when I have friends over.

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

24. I feel angry about my interactions with my __________________ .

Strongly Disagree	Disagree Somewhat	No Opinion	Agree Somewhat	Strongly Agree

APPENDIX M: FEELINGS ABOUT INSTITUTIONALIZATION

QUESTIONS ASKED OF CLIENTS

1. How does your caregiver feel about you entering a long term care facility at this time?

_____ Very Strongly Disapprove
_____ Fairly Strongly Disapprove
_____ Somewhat Disapprove
_____ Neutral
_____ Somewhat Approve
_____ Fairly Strongly Approve
_____ Very Strongly Approve

2. How do you fell about entering a long term care facility at this time?

_____ Very Strongly Disapprove
_____ Fairly Strongly Disapprove
_____ Somewhat Disapprove
_____ Neutral
_____ Somewhat Approve
_____ Fairly Strongly Approve
_____ Very Strongly Approve

QUESTIONS ASKED OF CAREGIVERS

How do you feel about placing ________________ in a long term care facility at this time?

_____ Very Strongly Disapprove
_____ Fairly Strongly Disapprove
_____ Somewhat Disapprove
_____ Neutral
_____ Somewhat Approve
_____ Fairly Strongly Approve
_____ Very Strongly Approve

APPENDIX N: SOCIAL RELATIONSHIP SCALE

THE SOCIAL RELATIONSHIP SCALE

I am going to read you six statements. After I read each statement please tell me the people with whom you would discuss the event. Use the person's first name or initials, and tell me how that person is related to you. Then tell me the degree of helpfulness or unhelpfulness of your discussion with each person by saying whether it makes things a lot worse, makes things a bit worse, helps things a bit, or helps a lot.

1. I discuss home and family with:

Name or Initials   Relation   Helpfulness of discussion (check one box)

________ ________________ makes things a lot worse   makes things a bit worse   helps things a bit   helps things a lot

☐ ☐ ☐ ☐ ☐ ☐ ☐

________ ________________ makes things a lot worse   makes things a bit worse   helps things a bit   helps things a lot

☐ ☐ ☐ ☐ ☐ ☐ ☐

________ ________________ makes things a lot worse   makes things a bit worse   helps things a bit   helps things a lot

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________ ________________ makes things a lot worse   makes things a bit worse   helps things a bit   helps things a lot

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________ ________________ makes things a lot worse   makes things a bit worse   helps things a bit   helps things a lot

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________ ________________ makes things a lot worse   makes things a bit worse   helps things a bit   helps things a lot

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________ ________________ makes things a lot worse   makes things a bit worse   helps things a bit   helps things a lot

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________ ________________ makes things a lot worse   makes things a bit worse   helps things a bit   helps things a lot

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2. I discuss work-related events with:

Name or Initials	Relation	Helpfulness of discussion (check one box)
_______	_______________	makes things a lot worse makes things a bit worse helps things a bit helps things a lot ☐ ☐ ☐ ☐ ☐ ☐ ☐
_______	_______________	makes things a lot worse makes things a bit worse helps things a bit helps things a lot ☐ ☐ ☐ ☐ ☐ ☐ ☐
_______	_______________	makes things a lot worse makes things a bit worse helps things a bit helps things a lot ☐ ☐ ☐ ☐ ☐ ☐ ☐
_______	_______________	makes things a lot worse makes things a bit worse helps things a bit helps things a lot ☐ ☐ ☐ ☐ ☐ ☐ ☐
_______	_______________	makes things a lot worse makes things a bit worse helps things a bit helps things a lot ☐ ☐ ☐ ☐ ☐ ☐ ☐
_______	_______________	makes things a lot worse makes things a bit worse helps things a bit helps things a lot ☐ ☐ ☐ ☐ ☐ ☐ ☐
_______	_______________	makes things a lot worse makes things a bit worse helps things a bit helps things a lot ☐ ☐ ☐ ☐ ☐ ☐ ☐
_______	_______________	makes things a lot worse makes things a bit worse helps things a bit helps things a lot ☐ ☐ ☐ ☐ ☐ ☐ ☐

3. I discuss financial problems with:

Name or Initials | Relation | Helpfulness of discussion (check one box)

_______ _______________ makes things a lot worse | makes things a bit worse | helps things a bit | helps things a lot

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_______ _______________ makes things a lot worse | makes things a bit worse | helps things a bit | helps things a lot

☐ ☐ ☐ ☐ ☐ ☐ ☐

_______ _______________ makes things a lot worse | makes things a bit worse | helps things a bit | helps things a lot

☐ ☐ ☐ ☐ ☐ ☐ ☐

_______ _______________ makes things a lot worse | makes things a bit worse | helps things a bit | helps things a lot

☐ ☐ ☐ ☐ ☐ ☐ ☐

_______ _______________ makes things a lot worse | makes things a bit worse | helps things a bit | helps things a lot

☐ ☐ ☐ ☐ ☐ ☐ ☐

_______ _______________ makes things a lot worse | makes things a bit worse | helps things a bit | helps things a lot

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_______ _______________ makes things a lot worse | makes things a bit worse | helps things a bit | helps things a lot

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_______ _______________ makes things a lot worse | makes things a bit worse | helps things a bit | helps things a lot

☐ ☐ ☐ ☐ ☐ ☐ ☐

4. I discuss personal health with:

Name or Initials	Relation	Helpfulness of discussion (check one box)						
________	________________	makes things a lot worse		makes things a bit worse		helps things a bit		helps things a lot
		☐	☐	☐	☐	☐	☐	☐
________	________________	makes things a lot worse		makes things a bit worse		helps things a bit		helps things a lot
		☐	☐	☐	☐	☐	☐	☐
________	________________	makes things a lot worse		makes things a bit worse		helps things a bit		helps things a lot
		☐	☐	☐	☐	☐	☐	☐
________	________________	makes things a lot worse		makes things a bit worse		helps things a bit		helps things a lot
		☐	☐	☐	☐	☐	☐	☐
________	________________	makes things a lot worse		makes things a bit worse		helps things a bit		helps things a lot
		☐	☐	☐	☐	☐	☐	☐
________	________________	makes things a lot worse		makes things a bit worse		helps things a bit		helps things a lot
		☐	☐	☐	☐	☐	☐	☐
________	________________	makes things a lot worse		makes things a bit worse		helps things a bit		helps things a lot
		☐	☐	☐	☐	☐	☐	☐
________	________________	makes things a lot worse		makes things a bit worse		helps things a bit		helps things a lot
		☐	☐	☐	☐	☐	☐	☐

5. I discuss problems related to social events with:

Name or Initials | Relation | Helpfulness of discussion (check one box)

______ ____________ makes things a lot worse | makes things a bit worse | helps things a bit | helps things a lot

☐ ☐ ☐ ☐ ☐ ☐ ☐

______ ____________ makes things a lot worse | makes things a bit worse | helps things a bit | helps things a lot

☐ ☐ ☐ ☐ ☐ ☐ ☐

______ ____________ makes things a lot worse | makes things a bit worse | helps things a bit | helps things a lot

☐ ☐ ☐ ☐ ☐ ☐ ☐

______ ____________ makes things a lot worse | makes things a bit worse | helps things a bit | helps things a lot

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______ ____________ makes things a lot worse | makes things a bit worse | helps things a bit | helps things a lot

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______ ____________ makes things a lot worse | makes things a bit worse | helps things a bit | helps things a lot

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______ ____________ makes things a lot worse | makes things a bit worse | helps things a bit | helps things a lot

☐ ☐ ☐ ☐ ☐ ☐ ☐

______ ____________ makes things a lot worse | makes things a bit worse | helps things a bit | helps things a lot

☐ ☐ ☐ ☐ ☐ ☐ ☐

6. I discuss societal problems in general with:

Name or Initials	Relation	Helpfulness of discussion (check one box)
________	________________	makes things a lot worse · makes things a bit worse · helps things a bit · helps things a lot ☐ ☐ ☐ ☐ ☐ ☐ ☐
________	________________	makes things a lot worse · makes things a bit worse · helps things a bit · helps things a lot ☐ ☐ ☐ ☐ ☐ ☐ ☐
________	________________	makes things a lot worse · makes things a bit worse · helps things a bit · helps things a lot ☐ ☐ ☐ ☐ ☐ ☐ ☐
________	________________	makes things a lot worse · makes things a bit worse · helps things a bit · helps things a lot ☐ ☐ ☐ ☐ ☐ ☐ ☐
________	________________	makes things a lot worse · makes things a bit worse · helps things a bit · helps things a lot ☐ ☐ ☐ ☐ ☐ ☐ ☐
________	________________	makes things a lot worse · makes things a bit worse · helps things a bit · helps things a lot ☐ ☐ ☐ ☐ ☐ ☐ ☐
________	________________	makes things a lot worse · makes things a bit worse · helps things a bit · helps things a lot ☐ ☐ ☐ ☐ ☐ ☐ ☐
________	________________	makes things a lot worse · makes things a bit worse · helps things a bit · helps things a lot ☐ ☐ ☐ ☐ ☐ ☐ ☐

APPENDIX O: MEDICATION CODES

A. Antimicrobial and antiparasitic agents
  1. Amebicides and antiprotozoals
  2. Anthelmintics
  3. Antifungals
  4. Antimalarials
  5. Antituberculars and antileprotics
  6. Aminoglycosides
  7. Penicillins
  8. Cephalosporins
  9. Tetracyclines
  10. Sulfonamides
  11. Quinolones
  12. Antivirals
  13. Miscellaneous anti-infectives

B. Cardiovascular System Drugs
  14. Digitalis glycosides and amrinone
  15. Antiarrhythmics
  16. Antianginals
  17. Antihypertensives
  18. Vasodilators
  19. Antilipemics

C. Central Nervous System Drugs
  20. Nonnarcotic analgesics and antipyretics
  21. Nonsteroidal anti-inflammatory drugs
  22. Narcotic and opioid analgesics
  23. Sedative-hypnotics
  24. Anticonvulsants
  25. Antidepressants
  26. Antianxiety agents

C. Central Nervous System Drugs (continued)

  27. Antipsychotics
  28. Miscellaneous psychotherapeutics
  29. Cerebral stimulants
  30. Antiparkinsonian agents

D. Autonomic Nervous System Drugs

  31. Cholinergics
  32. Anti-cholinergics
  33. Adrenergics
  34. Adrenergic blockers
  35. Skeletal muscle relaxants
  36. Neuromuscular blockers

E. Respiratory Tract Drugs

  37. Antihistamines
  38. Bronchodilators
  39. Expectorants and antitussives

F. Gastrointestinal Tract Drugs

  40. Antacids, adsorbents, and antiflatulents
  41. Digestants
  42. Antidiarrheals
  43. Laxatives
  44. Antiemetics
  45. Antiulcer agents

G. Hormonal Agents

  46. Corticosteroids
  47. Androgens and anabolic steroids
  48. Estrogens and progestins

G. Hormonal Agents (continued)
  49. Gonadotropins
  50. Antidiabetic agents and glucagon
  51. Thyroid hormone
  52. Thyroid hormone antagonists
  53. Pituitary hormones
  54. Parathyroid-like agents

H. Agents for Fluid and Electrolyte Balance
  55. Diuretics
  56. Electrolytes nad replacement solutions
  57. Acidifies and alkalinizers

I. Hematologic Agents
  58. Hematinics
  59. Anticoagulants
  60. Hemostatics
  61. Blood derivatives
  62. Thrombolytic enzymes

J. Antineoplastic agents
  63. Alkylating agents
  64. Antimetabolites
  65. Antibiotic antineoplastic agents
  66. Antineoplastics altering hormone balance
  67. Miscellaneous antineoplastic agents

K. Immunomodulation Agents
   68. Immunosuppressants
   69. Vaccines and toxoids
   70. Antitoxins and antivenins
   71. Immune serums
   72. Biological response modifiers

L. Eye, Ear, Nose, and Throat Drugs
   73. Ophthalmic anti-infectives
   74. Ophthalmic anti-inflammatory agents
   75. Miotics
   76. Mydriatics
   77. Ophthalmic vasoconstrictors
   78. Topical ophthalmic anesthetics
   79. Miscellaneous ophthalmics
   80. Otics
   81. Nasal agents

M. Dermatomucosal agents
   82. Local anti-infectives
   83. Scabicides and pediculicides
   84. Topical corticosteroids

N. Anesthetic Agents
   85. Local anesthetics
   86. General anesthetics

O. Nutritional Agents
   87. Vitamins and minerals
   88. Calorics

P. Miscellaneous Drug Categories

89. Antigout agents
90. Enzymes
91. Oxytocics
92. Spasmolytics
93. Gold salts
94. Diagnostic skin tests
95. Miscellaneous antagonists and antidotes
96. Uncategorized drugs
97. Investigational drugs
98. Homeopathic medications
99. Missing

APPENDIX P: DIAGNOSES CODES

A. Blood and Blood-Forming Organ Disorders

1. Anemia
2. Polycythemia
3. Other Blood Disorders

B. Circulatory Disorders

4. Aneurysms
5. Angina pectoris
6. Atherosclerosis (e.g. arterioscleroses)
7. Cardiac dysrhythmias
8. Cardiovascular disease unspecified (e.g. ASCVD)
9. Chronic ischemic heart disease (e.g. ASHD)
10. Heart failure (e.g. congestive heart disease, acute pulmonary edema)
11. Hemorrhoids
12. Hypertension, essential
13. Hypertensive heart disease
14. Peripheral vascular disease
15. Myocardial infarction, old
16. Pulmonary heart disease, chronic
17. Pulmonary heart disease, acute (e.g. pulmonary embolism and infarction)
18. Varicose veins/stasis ulcer
19. Other circulatory disease

C. Digestive Disorders

20. Cholelithiasis
21. Crohn's disease
22. Chronic liver disease, cirrhosis
23. Constipation
24. Diverticula of intestine
25. Dysphagia (e.g. difficulty in swallowing)
26. Esophageal diseases

C. Digestive Disorders (continued)

27. Gall bladder disorders, other (e.g. cholecystitis)
28. GI ulcers
29. Gastritis
30. Gastroenteritis of colitis (e.g. diarrhea)
31. Hiatus hernia
32. Intestinal malabsorption
33. Intestinal obstruction
34. Kidney infections
35. Liver disorders (e.g. hepatitis)
36. Pancreatic disease
37. Other disorders of digestion and excretion

D. Endocrine and Metabolic Disorders

38. Adrenal gland disorders (e.g. Cushing's syndrome)
39. Diabetes mellitus
40. Fluid/electrolyte disorders (e.g. dehydration)
41. Gout (e.g. Gouty appearance)
42. Malnutrition
43. Obesity
44. Pituitary gland/hypothalamic control disorders
45. Thyroid disorders
46. Other endocrine and metabolic disorders

E. Genitourinary Disorders

47. Calculus of kidney and ureter
48. Chronic renal failure
49. Genital prolapse

E. Genitourinary Disorders (continued)

50. Menopausal and postmenopausal disorders (e.g. bleeding, vaginitis)
51. Prostate disorders
52. Urinary tract infection
53. Other genitourinary disorder

F. Mental Problems

54. Alcoholism, chronic
55. Alzheimer's disease
56. Chronic organic brain syndrome
57. Dementia, arteriosclerotic, presenile and senile, multi-infarct
58. Depression
59. Down's syndrome
60. Drug dependence
61. Korsakoff's psychoses, alcoholic
62. Mental disorder (non-psychotic) following organic brain damage
63. Mental retardation
64. Neurotic disorders (e.g. anxiety states, phobic disorders, hypochondriasis, obsessive-compulsive disorders
65. Paranoid states
66. Psychoses, affective (e.g. manic depression)
67. Psychoses, other nonorganic (e.g. conditions provoked by emotional stress/ environment)
68. Schizophrenia
69. Senility without psychosis
70. Other mental problems

G. Musculoskeletal Disability

71. Arthritis, excluding osteoarthrosis
72. Bone infections (e.g. osteomyelitis)
73. Degeneration of intervertebral, cervical, thoracic, or lumbar disc

G. Musculoskeletal Disability (continued)

74. Disorders of synovium, tendon, and bursa (e.g. bursitis)
75. Fracture, neck or femur (e.g. head of femur, hip)
76. Fracture, other unspecified parts of femur
77. Fracture, humerus
78. Fracture, radius and ulna
79. Fracture, vertebra
80. Fracture, other
81. Osteoarthritis
82. Osteoporosis
83. Rheumatoid arthritis
84. Spondylosis
85. Traumatic amputation of leg, late effect
86. Other musculoskeletal disorders

H. Neoplasms

87. Carcinoma of brain
88. Carcinoma of female breast
89. Carcinoma of colon
90. Carcinoma of lung, trachea, and bronchus
91. Carcinoma of prostate
92. Carcinoma of skin
93. Carcinoma of stomach
94. Carcinomatosis, generalized cancer
95. Leukemias
96. Other neoplasms

I. Neurological Motor Dysfunction

97. Amyotrophic lateral sclerosis
98. Aphasia/Dysphasia
99. Cerebral degeneration, unspecified
100. Cerebral palsy
101. Cerebrovascular accident, acute phase
102. Cerebrovascular accident, late effects
103. Cerebrovascular disease, other
104. Convulsions
105. Epilepsy
106. Head injury
107. Hemiplegia
108. Huntington's chorea
109. Multiple sclerosis
110. Occlusion of cerebral arteries (e.g. cerebral thrombosis, embolism, infarction)
111. Paraplegia and quadriplegia
112. Parkinson's disease
113. Peripheral neuropathies
114. Poliomyelitis, late effects
115. Transient ischemic attacks (TIAs)
116. Other neurological dysfunction

J. Pulmonary Disease

117. Asthma
118. Bronchitis
119. Chronic sinusitis
120. Chronic obstructive pulmonary disease (COPD)
121. Emphysema
122. Pneumonia
123. Upper respiratory infection, acute
124. Other pulmonary disease

K. Sensory Disorders

125. Blindness and low vision
126. Cataract
127. Glaucoma
128. Hearing loss (e.g. deafness)
129. Retinal disorders
130. Other sensory disorders

L. Skin Disorders

131. Chronic skin ulcer
132. Dermatitis/Eczema
133. Psoriasis
134. Shingles
135. Other skin disorders

M. Infectious Disorders

136. Hepatitis B
137. Pulmonary tuberculosis
138. Other infectious diseases
139. Generalized weakness

APPENDIX Q: PRESENTATIONS AND PUBLICATIONS

Kerr, J. C. R., Molzahn, A., Warren, S., Schalm, C., Smith, D., Broad, E., Dekker, L., & Godkin, D. (September, 1992). Evaluating adult day programs for elderly people. [Abstract]. Proceedings of the 6th Biennial Conference of the Workgroup of European Nurse Researchers. Madrid, Spain.

Kerr, J. C. R., Molzahn, A., Warren, S., Schalm, C., Broad, E., Smith, D., & Godkin, D. (October, 1992). The evaluation of Alberta adult day program demonstration project. [Abstract]. Proceedings of the Pre-conference Workshop on Adult Day Programs of the Canadian Association on Gerontology. Edmonton, Alberta.

Kerr, J. R., Warren, S., Schalm, C., Smith, D., Broad, E., & Godkin, D. (June, 1993). Evaluating alternatives to institutionalization for elderly people. [Abstract]. Proceedings of the 20th Quadrennial Congress, International Council of Nurses. Madrid, Spain.

Kerr, J. R., Warren, S., Schalm, C., Smith, D., Broad, E., & Godkin, D. (June, 1993). Adult day programs as support for family caregivers. [Abstract]. Proceedings of the Sigma Theta Tau International Research Conference. Madrid, Spain.

Kerr, J. R., Warren, S., Schalm, C., Smith, D., Broad, E., & Godkin, D. (October, 1993). A profile of clients in adult day programs in Alberta. [Abstract]. Proceedings of the 22nd Annual Scientific and Educational Meeting of the Canadian Association on Gerontology. Montreal, Quebec.

Kerr, J. R., Warren, S., Schalm, C., Smith, D., Broad, E., & Godkin, D. (November, 1993). Support for clients in Adult Day Programs. [Abstract]. Proceedings of the Sigma Theta Tau International 32nd Biennial Convention. Indianapolis, Indiana.

Ross Kerr, J. C., Strang, V., Warren, S., Pearson, J., Schalm, C., Smith, C., Broad, E., Godkin, D., McIlveen, K. (March, 1994). A Canadian perspective on caregiver respite in adult day programs. [Abstract]. Proceedings of the 40th Annual Meeting of the American Society on Aging. San Francisco, California.

Ross Kerr, J. C., Warren, S., Schalm, C., Smith, D., Broad, E., Godkin, D. (May, 1994). Health and functional status of elderly adult day program clients. [Abstract]. Proceedings of the 1994 International Nursing Research Conference. Vancouver, British Columbia.

Ross Kerr, J. C., Warren, S., Schalm, C., Smith, D., Broad, E., Godkin, D. (May, 1994). Health and functional status of elderly adult day program clients. [Abstract]. Proceedings of the 1994 International Nursing Research Conference. Vancouver, British Columbia.

Ross Kerr, J. C., Warren, S., Schalm, C., Smith, D., Broad, E., & Godkin, D. (July, 1994). Quality of life of elderly clients in day programs. [Abstract]. Proceedings of the 7th Biennial Conference of the Workgroup of European Nurse Researchers. Oslo, Norway.

APPENDIX R: ADULT DAY PROGRAM CONSULTATION GROUP

ADULT DAY PROGRAM CONSULTATION GROUP

Corinne Schalm	Adult Day Program Evaluation Study Project Manager Manager, Development and Evaluation Projects, Long Term Care Branch, Alberta Health
Vivien Lai	Executive Director, Long Term Care Branch, Alberta Health
Lois Borden	Director, Home Care/Community Long Term Care Branch, Alberta Health
Donna Smith	Manager, Program Development, Long Term Care Branch, Alberta Health
Bev Curtis	Manager, Program Development, Home Care/Community Long Term Care Branch, Alberta Health
Elizabeth Broad	Program Planner, Long Term Care Branch, Alberta Health
Pam Prescott (Linda Barrett)	Manager, Youville Geriatric Psychiatry Day Hospital Program
Sandra DeBruin	Manager, Dickinsfield Day Hospital Program (Capital Care)
Linda Roswell	Manager, Rosehaven Care Centre, Camrose
Joan Kiernan (Terry Filmore)	Coordinator, Adult Day Health Care, Victorian Order of Nurses
Elsie Archer (Ruth Eby)	Manager, Adult Day Support Program, Didsbury
Linda Boychuck	Home Care Program, Foothills Health Unit
Ginny Woodland	Manager, High River Adult Day Support Program
Kjell Denhoff	Manager, Alzheimer's Society of Calgary (Club 36)
Elaine Hoon	Manager, St. Michael's Adult Day Hospital
Fran Lauzon	Medicine Hat Regional Hospital
Leigh-Anna Anton	Manager, Medicine Hat Psychogeriatric Day Hospital
Lorraine Oake	Chairman, Adult Day Support Program
Barbara McKernan (Faye Wheeler)	Manager, Association of Adult Day Support Programs, Edmonton
Penny Lane	Manager, Carewest, Calgary
Darlene Solvason	Manager, Kerby Centre, Calgary
Marie Berner	Manager, Dr. Vernon Fanning Extended Care Centre, Calgary
Susan Gokiert	Manager, Thorhild-Westlock Adult Day Support Program
Enid Theophile	Manager, Vegreville Adult Day Support Program
Betty Harrison	Manager, Adult Day Health Centre, Lethbridge

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